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FARMERS AND FARM PRODUCTION IN THE UNITED STATES

(A COOPERATIVE REPORT)

Cotton Producers and
Cotton Production

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SPECIAL REPORTS

1954 Census of Agriculture

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U. S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

WASHINGTON · 1956

U. S. Forest Service

U. S. Department of Agriculture
Ezra Taft Benson, *Secretary*

Agricultural Research Service
Byron T. Shaw, *Administrator*

U. S. Department of Commerce
Sinclair Weeks, *Secretary*

Bureau of the Census
Robert W. Burgess, *Director*

United States Census of Agriculture: 1954

Volume III
SPECIAL REPORTS
Part 9
Farmers and Farm Production in the United States
(A Cooperative Report)

Chapter II

Cotton Producers and
Cotton Production

CHARACTERISTICS OF FARMERS and FARM PRODUCTION •

PRINCIPAL TYPES OF FARMS •

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PREFACE

The purpose of this report is to present an analysis of the characteristics of farmers and farm production for the most important types of farms as shown by data for the 1954 Census of Agriculture. The analysis deals with the relative importance, pattern of resource use, some measures of efficiency, and problems of adjustment and change for the principal types of farms.

The data given in the various chapters of this report have been derived largely from the special tabulation of data for each type of farm, by economic class, for the 1954 Census of Agriculture. The detailed statistics for each type of farm for the United States and the principal subregions appear in Part 8 of Volume III of the reports for the 1954 Census of Agriculture.

This cooperative report was prepared under the direction of Ray Hurley, Chief of the Agriculture Division of the Bureau of the Census, U. S. Department of Commerce, and Kenneth L. Bachman, Head, Production, Income, and Costs Section, Production Economics Research Branch, Agricultural Research Service of the U. S. Department of Agriculture.

Jackson V. McElveen, Agricultural Economist, Production, Income, and Costs Section, Production Economics Research Branch, Agricultural Research Service of the U. S. Department of Agriculture, supervised a large part of the detailed planning and analysis for the various chapters.

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Chapter IV—— Poultry Producers and Poultry Production
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Chapter V—— Dairy Producers and Dairy Production
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Chapter VI—— Western Stock Ranches and Livestock Farms
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Chapter VII Cash-grain and Livestock Producers in the Corn Belt
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Chapter IX—— Agricultural Producers and Production in the United States—A General View
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The editorial work for this report was performed by Caroline B. Sherman, and the preparation of the statistical tables was supervised by Margaret Wood.

December 1956

UNITED STATES CENSUS OF AGRICULTURE: 1954

REPORTS

Volume I.—Counties and State Economic Areas. Statistics for counties include number of farms, acreage, value, and farm operators; farms by color and tenure of operator; facilities and equipment; use of commercial fertilizer; farm labor; farm expenditures; livestock and livestock products; specified crops harvested; farms classified by type of farm and by economic class; and value of products sold by source.

Data for State economic areas include farms and farm characteristics by tenure of operator, by type of farm, and by economic class.

Volume I is published in 33 parts.

Volume II.—General Report. Statistics by Subjects, United States Census of Agriculture, 1954. Summary data and analyses of the data for States, for Geographic Divisions, and for the United States by subjects.

Volume III.—Special Reports

Part 1.—Multiple-Unit Operations. This report will be similar to Part 2 of Volume V of the reports for the 1950 Census of Agriculture. It will present statistics for approximately 900 counties and State economic areas in 12 Southern States and Missouri for the number and characteristics of multiple-unit operations and farms in multiple units.

Part 2.—Ranking Agricultural Counties. This special report will present statistics for selected items of inventory and agricultural production for the leading counties in the United States.

Part 3.—Alaska, Hawaii, Puerto Rico, District of Columbia, and U. S. Possessions. These areas were not included in the 1954 Census of Agriculture. The available current data from various Government sources will be compiled and published in this report.

Part 4.—Agriculture, 1954, a Graphic Summary. This report will present graphically some of the significant facts regarding agriculture and agricultural production as revealed by the 1954 Census of Agriculture.

Part 5.—Farm-Mortgage Debt. This will be a cooperative study by the Agricultural Research Service of the U. S. Department of Agriculture and the Bureau of the Census. It will present, by States, data based on the 1954 Census of Agriculture and a special mail survey conducted in January 1956, on the number of mortgaged farms, the amount of mortgage debt, and the amount of debt held by principal lending agencies.

Part 6.—Irrigation in Humid Areas. This cooperative report by the Agricultural Research Service of the U. S. Department of Agriculture and the Bureau of the Census will present data obtained by a mail survey of operators of irrigated farms in 28 States on the source of water, method of applying water, number of pumps used, acres of crops irrigated in 1954 and 1955, the number of times each crop was irrigated, and the cost of irrigation equipment and the irrigation system.

Part 7.—Popular Report of the 1954 Census of Agriculture. This report is planned to be a general, easy-to-read publication for the general public on the status and broad characteristics of United States agriculture. It will seek to delineate such aspects of agriculture as the geographic distribution and differences by size of farm for such items as farm acreage, principal crops, and important kinds of livestock, farm facilities, farm equipment, use of fertilizer, soil conservation practices, farm tenure, and farm income.

Part 8.—Size of Operation by Type of Farm. This will be a cooperative special report to be prepared in cooperation with the Agricultural Research Service of the U. S. Department of Agriculture. This report will contain data for 119 economic subregions (essentially general type-of-farming areas) showing the general characteristics for each type of farm by economic class. It will provide data for a current analysis of the differences that exist among groups of farms of the same type. It will furnish statistical basis for a realistic examination of production of such commodities as wheat, cotton, and dairy products in connection with actual or proposed governmental policies and programs.

Part 9.—Farmers and Farm Production in the United States. The purpose of this report is to present an analysis of the characteristics of farmers and farm production for the most important types of farms as shown by data for the 1954 Census of Agriculture. The analysis deals with the relative importance, pattern of resource use, some measures of efficiency, and problems of adjustment and change for the principal types of farms. The report was prepared in cooperation with the Agricultural Research Service of the U. S. Department of Agriculture.

The list of chapters (published separately only) and title for each chapter are as follows:

Chapter I—*Wheat Producers and Wheat Production*
II—*Cotton Producers and Cotton Production*
III—*Tobacco and Peanut Producers and Production*
IV—*Poultry Producers and Poultry Production*
V—*Dairy Producers and Dairy Production*
VI—*Western Stock Ranches and Livestock Farms*
VII—*Cash-Grain and Livestock Producers in the Corn Belt*
VIII—*Part-Time Farming*
IX—*Agricultural Producers and Production in the United States—A General View*

Part 10.—Use of Fertilizer and Lime. The purpose of this report is to present in one publication most of the detailed data compiled for the 1954 Census of Agriculture regarding the use of fertilizer and lime. The report presents data for counties, State economic areas, and generalized type-of-farming areas regarding the quantity used, acreage on which used, and expenditures for fertilizer and lime. The Agricultural Research Service cooperated with the Bureau of the Census in the preparation of this report.

Part 11.—Farmers' Expenditures. This report presents detailed data on expenditures for a large number of items used for farm production in 1955, and on the living expenditures of farm operators' families. The data were collected and compiled cooperatively by the Agricultural Marketing Service of the U. S. Department of Agriculture and the Bureau of the Census.

Part 12.—Methods and Procedures. This report contains an outline and a description of the methods and procedures used in taking and compiling the 1954 Census of Agriculture.

INTRODUCTION

ECONOMIC SUBREGIONS AND STATE ECONOMIC AREAS

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

INTRODUCTION

Purpose and scope.—American agriculture is exceedingly diverse and is undergoing revolutionary changes. Farmers and their families obtain their income by producing a large variety of products under a large variety of conditions as well as from sources other than farming. The organization of production, type of farming, productivity, income, expenditures, size, and characteristics of operators of the 4.8 million farms in the United States vary greatly. Agriculture has been a dynamic, moving, adjusting part of our economy. Basic changes in farming have been occurring and will continue to be necessary. Adjustments brought by technological change, by changing consumer wants, by growth of population, and by changes in the income of nonfarm people, have been significant forces in changing agriculture since World War II. The transition from war to an approximate peacetime situation has also made it necessary to reduce the output of some farm products. Some of the adjustments in agriculture have not presented relatively difficult problems as they could be made by the transfer of resources from the production of one product to another. Others require substantial shifts in resources and production.

Moreover, a considerable number of farm families, many of whom are employed full time in agriculture, have relatively low incomes. Most of these families operate farms that are small when compared with farms that produce higher incomes. The acreage of land and the amount of capital controlled by the operators of these small farms are too small to provide a very high level of income. In recent years, many farm families on these small farms have made adjustments by leaving the farm to earn their incomes elsewhere, by discontinuing their farm operations, and by earning more nonfarm income while remaining on the farm or on the place they farmed formerly.

One objective of this report is to describe and analyze some of the existing differences and recent adjustments in the major types of farming and farm production. For important commodities and groups of farms, the report aims to make available, largely from the detailed data for the 1954 Census of Agriculture but in a more concise form, facts regarding the size of farms, capital, labor, and land resources on farms, amounts and sources of farm income and expenditures, combinations of crop and livestock enterprises, adjustment problems, operator characteristics, and variation in use of resources and in size of farms by areas and for widely differing production conditions. Those types of farms on which production of surplus products is important have been emphasized. The report will provide a factual basis for a better understanding of the widespread differences among farms in regard to size, resources, and income. It will also provide a basis for evaluating the effects of existing and proposed farm programs on the production and incomes of major types and classes of farms.

Income from nonfarm sources is important on a large number of farms. About 1.4 million of the 4.8 million farm-operator families, or about 3 in 10, obtain more income from off-farm sources than from the sale of agricultural products. More than three-fourths of a million farm operators live on small-scale part-time farms and ordinarily are not dependent on farming as the main source of family income. These part-time farmers have a quite different relation to adjustments, changes, and farm problems than do commercial farmers. A description of and facts regarding these part-time farms and the importance of nonfarm income for commercial farms are presented in Chapter 8.

Except for Chapter 8, this report deals with commercial farms (see economic class of farm). The analysis is limited to the major types of agricultural production and deals primarily with geographic areas in which each of the major types of agricultural production has substantial significance.

Source of data.—Most of the data presented in this report are from special compilations made for the 1954 Census of Agriculture, although pertinent data from research findings and surveys of the U. S. Department of Agriculture, State Agricultural Colleges, and other agencies have been used to supplement Census data. The detailed Census data used for this report are contained in Part 8 of Volume III of the reports of the 1954 Census of Agriculture. Reference should be made to that report for detailed explanations and definitions and statements regarding the characteristics and reliability of the data.

Areas for which data are presented.—Data are presented in this report primarily for selected economic subregions and for the United States. The boundaries of the 119 subregions used for the compilation of data on which this report is based are indicated by the map on page VI. These subregions represent primarily general type-of-farming areas. Many of them extend into two or more States. (For a more detailed description of economic subregions, see the publication "Economic Subregions of the United States, Series Census BAE; No. 19, published cooperatively by the Bureau of the Census, and the Bureau of Agricultural Economics, U. S. Department of Agriculture, July 1953.)

DEFINITIONS AND EXPLANATIONS

Definitions and explanations are given only for some of the more important items. For more detailed definitions and explanations, reference can be made to Part 8 of Volume III and to Volume II of the reports of the 1954 Census of Agriculture.

A farm.—For the 1954 Census of Agriculture, places of 3 or more acres were counted as farms if the annual value of agricultural products, exclusive of home-garden products, amounted to $150 or more. The agricultural products could have been either for home use or for sale. Places of less than 3 acres were counted as farms only if the annual value of sales of agricultural products amounted to $150 or more. Places for which the value of agricultural products for 1954 was less than these minima because of crop failure or other unusual conditions, and places operated at the time of the Census for the first time were counted as farms if normally they could be expected to produce these minimum quantities of agricultural products.

All the land under the control of one person or partnership was included as one farm. Control may have been through ownership, or through lease, rental, or cropping arrangement.

Farm operator.—A "farm operator" is a person who operates a farm, either performing the labor himself or directly supervising it. He may be an owner, a hired manager, or a tenant, renter, or sharecropper. If he rents land to others or has land cropped for him by others, he is listed as the operator of only that land which he retains. In the case of a partnership, only one partner was included as the operator. The number of farm operators is considered the same as the number of farms.

Farms reporting or operators reporting.—Figures for farms reporting or operators reporting, based on a tabulation of all farms, represent the number of farms, or farm operators, for which the specified item was reported. For example, if there were 11,922 farms in a subregion and only 11,465 had chickens over 4 months old on hand, the number of farms reporting chickens would be 11,465. The difference between the total number of farms and the number of farms reporting an item represents the number of farms not having that item, provided the inquiry was answered completely for all farms.

Farms by type.—The classification of commercial farms by type was made on the basis of the relationship of the value of sales from a particular source, or sources, to the total value of all farm products sold from the farm. In some cases, the type of farm was determined on the basis of the sale of an individual farm product, such as cotton, or on the basis of the sales of closely related products, such as dairy products. In other cases, the type of farm was determined on the basis of sales of a broader group of products, such as grain crops including corn, sorghums, all small grains, field peas, field beans, cowpeas, and soybeans. In order to be classified as a particular type, sales or anticipated sales of a product or group of products had to represent 50 percent or more of the total value of products sold.

The types of commercial farms for which data are shown, together with the product or group of products on which the classification is based are:

Type of farm	*Product or group of products amounting to 50 percent or more of the value of all farm products sold*
Cash-grain	Corn, sorghum, small grains, field peas, field beans, cowpeas, and soybeans.
Cotton	Cotton (lint and seed).
Other field-crop	Peanuts, Irish potatoes, sweetpotatoes, tobacco, sugarcane, sugar beets for sugar, and other miscellaneous crops.
Vegetable	Vegetables.
Fruit-and-nut	Berries and other small fruits, and tree fruits, nuts, and grapes.
Dairy	Milk and other dairy products. The criterion of 50 percent of the total sales was modified in the case of dairy farms. A farm for which the value of sales of dairy products represented less than 50 percent of the total value of farm products sold was classified as a dairy farm if— (*a*) Milk and other dairy products accounted for 30 percent or more of the total value of products sold, and (*b*) Milk cows represented 50 percent or more of all cows, and (*c*) Sales of dairy products, together with the sales of cattle and calves, amounted to 50 percent or more of the total value of farm products sold.
Poultry	Chickens, eggs, turkeys, and other poultry products.
Livestock farms other than dairy and poultry.	Cattle, calves, hogs, sheep, goats, wool, and mohair, provided the farm did not qualify as a dairy farm.
General	Farms were classified as general when the value of products from one source or group of sources did not represent as much as 50 percent of the total value of all farm products sold. Separate figures are given for three kinds of general farms: (*a*) Primarily crop. (*b*) Primarily livestock. (*c*) Crop and livestock.
	Primarily crop farms are those for which the sale of one of the following crops or groups of crops—vegetables, fruits and nuts, cotton, cash grains, or other field crops—did not amount to 50 percent or more of the value of all farm products sold, but for which the value of sales for all these groups of crops represented 70 percent or more of the value of all farm products sold.
	Primarily livestock farms are those which could not qualify as dairy farms, poultry farms, or livestock farms other than dairy and poultry, but on which the sale of livestock and poultry and livestock and poultry products amounted to 70 percent or more of the value of all farm products sold.
	General crop and livestock farms are those which could not be classified as either crop farms or livestock farms, but on which the sale of all crops amounted to at least 30 percent but less than 70 percent of the total value of all farm products sold.
Miscellaneous	This group of farms includes those that had 50 percent or more of the total value of products accounted for by sale of horticultural products, or sale of horses, or sale of forest products.

Farms by economic class.—A classification of farms by economic class was made for the purpose of segregating groups of farms that are somewhat alike in their characteristics and size of operation. This classification was made in order to present an accurate description of the farms in each class and in order to provide basic data for an analysis of the organization of agriculture.

The classification of farms by economic class was made on the basis of three factors; namely, total value of all farm products sold, number of days the farm operator worked off the farm, and the relationship of the income received from nonfarm sources by the operator and members of his family to the value of all farm products sold. Farms operated by institutions, experiment stations, grazing associations, and community projects were classified as abnormal, regardless of any of the three factors.

For the purpose of determining the code for economic class and type of farm, it was necessary to obtain the total value of farm products sold as well as the value of some individual products sold.

The total value of farm products sold was obtained by adding the reported or estimated values for all products sold from the farm. The value of livestock, livestock products except wool and mohair, vegetables, nursery and greenhouse products, and forest

products was obtained by the enumerator from the farm operator for each farm. The enumerator also obtained from the farm operator the quantity sold for corn, sorghums, small grains, hays, and small fruits. The value of sales for these crops was obtained by multiplying the quantity sold by State average prices.

The quantity sold was estimated for all other farm products. The entire quantity produced for wool, mohair, cotton, tobacco, sugar beets for sugar, sugarcane for sugar, broomcorn, hops, and mint for oil was estimated as sold. To obtain the value of each product sold, the quantity sold was multiplied by State average prices.

In making the classification of farms by economic class, farms were grouped into two major groups, namely, commercial farms and other farms. In general, all farms with a value of sales of farm products amounting to $1,200 or more were classified as commercial. Farms with a value of sales of $250 to $1,199 were classified as commercial only if the farm operator worked off the farm less than 100 days or if the income of the farm operator and members of his family received from nonfarm sources was less than the total value of all farm products sold.

Land in farms according to use.—Land in farms was classified according to the use made of it in 1954. The classes of land are mutually exclusive, i. e., each acre of land was included only once even though it may have had more than one use during the year.

The classes referred to in this report are as follows:

Cropland harvested.—This includes land from which crops were harvested; land from which hay (including wild hay) was cut; and land in small fruits, orchards, vineyards, nurseries, and greenhouses. Land from which two or more crops were reported as harvested was to be counted only once.

Cropland used only for pasture.—In the 1954 Census, the enumerator's instructions stated that rotation pasture and all other cropland that was used only for pasture were to be included under this class. No further definition of cropland pastured was given the farm operator or enumerator. Permanent open pasture may, therefore, have been included under this item or under "other pasture," depending on whether the enumerator or farm operator considered it as cropland.

Cropland not harvested and not pastured.—This item includes idle cropland, land in soil-improvement crops only, land on which all crops failed, land seeded to crops for harvest after 1954, and cultivated summer fallow.

In the Western States, this class was subdivided to show separately the acres of cultivated summer fallow. In these States, the acreage not in cultivated summer fallow represents largely crop failure. There are very few counties in the Western States in which there is a large acreage of idle cropland or in which the growing of soil-improvement crops is an important use of the land.

In the States other than the Western States, this general class was subdivided to show separately the acres of idle cropland (not used for crops or for pasture in 1954). In these States, the incidence of crop failure is usually low. It was expected that the acreage figure that excluded idle land would reflect the acreage in soil-improvement crops. However, the 1954 crop year was one of low rainfall in many Eastern and Southern States and, therefore, in these areas the acreage of cropland not harvested and not pastured includes more land on which all crops failed than would usually be the case.

Cultivated summer fallow.—This item includes cropland that was plowed and cultivated but left unseeded for several months to control weeds and conserve moisture. No land from which crops were harvested in 1954 was to be included under this item.

Cropland, total.—This includes cropland harvested, cropland used only for pasture, and cropland not harvested and not pastured.

Land pastured, total.—This includes cropland used only for pasture, woodland pastured, and other pasture (not cropland and not woodland).

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Woodland, total.—This includes woodland pastured and woodland not pastured.

Value of land and buildings.—The value to be reported was the approximate amount for which the land and the buildings on it would sell.

Off-farm work and other income.—Many farm operators receive a part of their income from sources other than the sale of farm products from their farms. The 1954 Agriculture Questionnaire included several inquiries relating to work off the farm and nonfarm income. These inquiries called for the number of days worked off the farm by the farm operator; whether other members of the operator's family worked off the farm; and whether the farm operator received income from other sources, such as sale of products from land rented out, cash rent, boarders, old age assistance, pensions, veterans' allowances, unemployment compensation, interest, dividends, profits from nonfarm business, and help from other members of the operator's family. Another inquiry asked whether the income of the operator and his family from off-farm work and other sources was greater than the total value of all agricultural products sold from the farm in 1954. Off-farm work was to include work at nonfarm jobs, businesses, or professions, whether performed on the farm premises or elsewhere; also, work on someone else's farm for pay or wages. Exchange work was not to be included.

Specified facilities and equipment.—Inquiries were made in 1954 to determine the presence or absence of selected items on each place such as (1) telephone, (2) piped running water, (3) electricity, (4) television set, (5) home freezer, (6) electric pig brooder, (7) milking machine, and (8) power feed grinder. Such facilities or equipment were to be counted even though temporarily out of order. Piped running water was defined as water piped from a pressure system or by gravity flow from a natural or artificial source. The enumerator's instructions stated that pig brooders were to include those heated by an electric heating element, by an infrared or heat bulb, or by ordinary electric bulbs. They could be homemade.

The number of selected types of other farm equipment was also obtained for a sample of farms. The selected kinds of farm equipment to be reported were (1) grain combines (for harvesting and threshing grains or seeds in one operation); (2) cornpickers; (3) pickup balers (stationary ones not to be reported); (4) field forage harvesters (for field chopping of silage and forage crops); (5) motortrucks; (6) wheel tractors (other than garden); (7) garden tractors; (8) crawler tractors (tracklaying, caterpillar); (9) automobiles; and (10) artificial ponds, reservoirs, and earth tanks.

Wheel tractors were to include homemade tractors but were not to include implements having built-in power units such as self-propelled combines, powered buck rakes, etc. Pickup and truck-trailer combinations were to be reported as motortrucks. School buses were not to be reported, and jeeps and station wagons were to be included as motortrucks or automobiles, depending on whether used for hauling farm products or supplies, or as passenger vehicles.

Farm labor.—The farm-labor inquiries for 1954, called for the number of persons doing farmwork or chores on the place during a specified calendar week. Since starting dates of the 1954 enumeration varied by areas or States, the calendar week to which the farm-labor inquiries related varied also. The calendar week was September 26–October 2 or October 24–30. States with the September 26–October 2 calendar week were: Arizona, California, Colorado, Connecticut, Florida, Idaho, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico,

New York, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming. States with the October 24–30 calendar week were: Alabama, Arkansas, Delaware, Georgia, Illinois, Indiana, Iowa, Maryland, Mississippi, Missouri, North Carolina, Ohio, South Carolina, Virginia, and West Virginia. Farmwork was to include any work, chores, or planning necessary to the operation of the farm or ranch business. Housework, contract construction work, and labor involved when equipment was hired (custom work) were not to be included.

The farm-labor information was obtained in three parts: (1) Operators working, (2) unpaid members of the operator's family working, and (3) hired persons working. Operators were considered as working if they worked 1 or more hours; unpaid members of the operator's family, if they worked 15 or more hours; and hired persons, if they worked any time during the calendar week specified. Instructions contained no specifications regarding age of the persons working.

Regular and seasonal workers.—Hired persons working on the farm during the specified week were classed as "regular" workers if the period of actual or expected employment was 150 days or more during the year, and as "seasonal" workers if the period of actual or expected employment was less than 150 days. If the period of expected employment was not reported, the period of employment was estimated for the individual farm after taking into account such items as the basis of payment, wage rate, expenditures for labor in 1954, and the type and other characteristics of the farm.

Specified farm expenditures.—The 1954 Census obtained data for selected farm expense items in addition to those for fertilizer and lime. The expenditures were to include the total specified expenditures for the place whether made by landlord, tenant, or both.

Expenditures for machine hire were to include any labor included in the cost of such machine hire. Machine hire refers to custom machine work such as tractor hire, threshing, combining, silo filling, baling, ginning, plowing, and spraying. If part of the farm products was given as pay for machine hire, the value of the products traded for this service was to be included in the amount of expenditures reported. The cost of trucking, freight, and express was not to be included.

Expenditures for hired labor were to include only cash payments. Expenditures for housework, custom work, and contract construction work were not to be included.

Expenditures for feed were to include the expenditures for pasture, salt, condiments, concentrates, and mineral supplements, as well as those for grain, hay, and mill feeds. Expenditures for grinding and mixing feeds were also to be included. Payments made by a tenant to his landlord for feed grown on the land rented by the tenant were not to be included.

Expenditures for gasoline and other petroleum fuel and oil were to include only those used for the farm business. Petroleum products used for the farmer's automobile for pleasure or used exclusively in the farm home for heating, cooking, and lighting were not to be included.

Crops harvested.—The information on crops harvested refers to the acreage and quantity harvested for the 1954 crop year. An exception was made for land in fruit orchards and planted nut trees. In this case, the acreage represents that in both bearing and nonbearing trees and vines as of October and November 1954.

Hay.—The data for hay includes all kinds of hay except soybean, cowpea, sorghum, and peanut hay.

Livestock and poultry.—The data on the number of livestock and poultry represent the number on hand on the day of enumeration (October-November 1954). The data relating to livestock products and the number of livestock sold relate to the sales made during the calendar year 1954.

LABOR RESOURCES

The data for labor resources available represent estimates based largely on Census data and developed for the purpose of making comparisons among farms of various size of operations. The labor resources available are stated in terms of man-equivalents.

To obtain the man-equivalents the total number of farm operators as reported by the 1954 Census were adjusted for estimated man-years of work off the farm and for the number of farm operators 65 years old and over. The farm operator was taken to represent a full man-equivalent of labor unless he was 65 years or older or unless he worked at an off-farm job in 1954.

The man-equivalent estimated for farm operators reporting specified amounts of off-farm work were as follows:

Days worked off the farm in 1954	*Estimated man-equivalent*
1–99 days	0.85
100–199 days	.50
200 days and over	.15

The man-equivalent for farm operators 65 years of age and older was estimated at 0.5.

Man-equivalents of members of the farm operator's family were based upon Census data obtained in response to the question "How many members of your family did 15 or more hours of farm work on this place the week of September 26–October 2 (or, in some areas, the week of October 24–30) without receiving cash wages?" Each family worker was considered as 0.5 man-equivalent. This estimate provides allowance for the somewhat higher incidence of women, children, and elderly persons in the unpaid family labor force.

In addition, the number of unpaid family workers who were reported as working 15 or more hours in the week of September 26–October 2 was adjusted to take account of seasonal changes in farm employment. Using published and unpublished findings of the U. S. Department of Agriculture and State Agricultural Colleges, and depending largely upon knowledge and experience with the geographic areas and type of farming, each author determined the adjustment factor needed to correct the number of family workers reported for the week of September 26–October 2 to an annual average basis.

Man-equivalents of hired workers are based entirely upon the expenditure for cash wages and the average wage of permanent hired laborers as reported in the 1954 Census of Agriculture.

Value of or investment in livestock.—Numbers of specified livestock and poultry in each subregion were multiplied by a weighted average value per head. The average values were computed from data compiled for each kind of livestock for the 1954 Census of Agriculture. The total value does not include the value of goats. (For a description of the method of obtaining the value of livestock, see Chapter VI of Volume II of the reports for the 1954 Census of Agriculture.)

Value of investment in machinery and equipment.—The data on value of investment in machinery and equipment were developed for the purpose of making broad comparisons among types and economic classes of farms and by subregions. Numbers of specified machines on farms, as reported by the Census, were multiplied by estimated average value per machine. Then the total values obtained were adjusted upward to provide for the inclusion of items of equipment not included in the Census inventory of farm machinery.

The estimates for average value of specified machines and the proportion of total value of all machinery represented by the value of these machines were based largely on published and unpublished data from the "Farm Costs and Returns" surveys conducted currently by the Agricultural Research Service, U. S. Department of Agriculture.[1] Modifications were made as needed in the individual chapters on the basis of State and local studies. The total estimated value of all machinery for all types and economic classes of farms is approximately equal to the value of all machinery as estimated by the U. S. Department of Agriculture.

Value of farm products sold, or gross sales.—Data on the value of the various farm products sold were obtained for 1954 by two methods. First, the values of livestock and livestock products sold, except wool and mohair; vegetables harvested for sale; nursery and greenhouse products; and forest products were obtained by asking each farm operator the value of sales. Second, the values of all other farm products sold were computed. For the most important crops, the quantity sold or to be sold was obtained for each farm. The entire quantity harvested for cotton and cottonseed, tobacco, sugar beets for sugar, hops, mint for oil, and sugarcane for sugar was considered sold. The quantity of minor crops sold was estimated. The value of sales for each crop was computed by multiplying the quantity sold by State average prices. In the case of wool and mohair, the value of sales was computed by multiplying the quantity shorn or clipped by the State average prices.

Gross sales include the value of all kinds of farm products sold. The total does not include rental and benefit, soil conservation, price adjustment, Sugar Act, and similar payments. The total does include the value of the landlord's share of a crop removed from a farm operated by a share tenant. In most of the tables, detailed data are presented for only the more important sources of gross sales and the total for the individual farm products or sources will not equal the total as the values for the less important sources or farm products have been omitted. (For a detailed statement regarding the reliability and method of obtaining the value of farm products sold, reference should be made to Chapter IX of Volume II of the reports for the 1954 Census of Agriculture.)

Livestock and livestock products sold.—The value of sales for livestock and livestock products includes the value of live animals sold, dairy products sold, poultry and poultry products sold, and the calculated value of wool and mohair. The value of bees, honey, fur animals, goats, and goat milk is not included.

The value of dairy products includes the value of whole milk and cream sold, but does not include the value of butter and cheese, made on the farm, and sold. The value of poultry and products includes the value of chickens, broilers, chicken eggs, turkeys, turkey eggs, ducks, geese, and other miscellaneous poultry and poultry products sold. The value does not include the value of baby chicks sold.

Crops sold.—Vegetables sold includes the value of all vegetables harvested for sale, but does not include the value of Irish potatoes and sweetpotatoes.

The value of all crops sold includes the value of all crops sold except forest products. The value of field crops sold includes the value of sales of all crops sold except vegetables, small fruits and berries, fruits, and nuts.

[1] Farm Costs and Returns, 1955 (with comparisons), Agriculture Information Bulletin No. 158, Agricultural Research Service, U. S. Department of Agriculture, June 1956.

CHAPTER II

COTTON PRODUCERS AND COTTON PRODUCTION

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COTTON PRODUCERS AND COTTON PRODUCTION

Robert B. Glasgow

INTRODUCTION

SIGNIFICANCE OF COTTON PRODUCTION

Cotton production is one of the most important enterprises found on American farms. It takes place in only 20 of the 48 States, and is of appreciable significance in only 14 States, yet no other single crop in this country accounts for so large a proportion of total farm sales. Moreover, except for dairying, no other single crop or livestock enterprise accounts for half or more of the total farm sales on so many farms.

Cotton is grown to a varying extent in all of the 19 States that have some part of their land south of the 37th parallel of latitude, and a very small acreage is grown in Kansas just north of this parallel. States in which cotton is not of appreciable significance are those having southern borders at or near the 37th parallel. In addition to Kansas, these are Virginia, Kentucky, Illinois, and Nevada. In Florida, cotton does not loom large in the agriculture as a whole.

The 14 remaining States in which cotton production is of considerable significance are shown in tables 1 and 2. These tables also show some data regarding national and State trends, and some indications of the relative importance of the cotton enterprise to the agriculture of the country as a whole, and to the agriculture of the major cotton-producing States.

The fact that the States that grow cotton constitute a vast contiguous area extending from the Atlantic Ocean to the Pacific precludes consideration of cotton as a regional crop in any usual sense of that term (see figs. 1 and 2).

Cotton and the salient economic facts and characteristics of cotton production are of significance to thousands of people who are not on farms but who are engaged in cotton-oriented services and processing industries. Problems associated with cotton production even concern all consumers of fibers, for despite the tremendous increase during the last 15 years in the production and consumption of synthetic fibers, the per capita domestic consumption of cotton has remained relatively stable. In 1954, it accounted for more than two-thirds of all fiber used in the United States.

A further general fact of widely ramifying import is that, although the United States is, and has long been, the largest single consumer of cotton, it is also the world's leading exporter of raw cotton, thus making this commodity a notable factor in the international trade of the United States.

Table 1.—Farms Reporting Cotton as a Percent of All Farms and Acres of Cotton Harvested as a Percent of Cropland Harvested, for Specified States: 1930 to 1954

State	1954		1950		1945		1940		1930	
	Percent of farms	Percent of cropland harvested	Percent of farms	Percent of cropland harvested	Percent of farms	Percent of cropland harvested	Percent of farms	Percent of cropland harvested	Percent of farms	Percent of cropland harvested
Alabama	60.2	24.0	68.8	32.3	64.6	22.3	86.6	27.1	90.1	50.1
Arizona	29.4	40.1	16.0	42.2	7.6	21.5	10.8	34.9	24.3	44.1
Arkansas	46.7	30.7	54.9	43.4	57.4	29.5	69.5	31.1	79.3	52.4
California	8.0	10.6	6.1	10.8	3.1	3.5	4.0	4.8	3.2	4.6
Florida	9.6	1.7	9.9	2.5	7.8	1.4	14.3	3.5	20.7	8.5
Georgia	47.7	16.4	55.7	21.9	53.4	16.4	77.4	21.1	80.9	40.9
Louisiana	46.2	22.3	51.6	29.1	61.3	23.3	76.2	26.9	79.6	47.8
Mississippi	72.4	35.2	75.9	45.1	80.0	35.4	89.2	35.2	90.2	60.8
Missouri	6.8	3.4	7.1	4.8	7.0	3.1	6.5	3.1	6.3	2.7
New Mexico	15.9	17.4	14.6	15.0	8.4	5.3	8.3	5.7	11.9	9.1
North Carolina	28.9	9.5	36.5	11.6	37.1	11.7	37.1	11.6	54.2	28.2
Oklahoma	22.5	8.8	26.8	10.3	37.1	10.5	48.4	13.1	60.6	26.7
South Carolina	61.3	23.9	67.0	30.2	69.4	24.7	81.1	27.2	83.2	47.7
Tennessee	27.7	13.0	28.9	15.9	28.4	11.2	31.3	11.0	36.0	17.1
Texas	43.0	30.2	46.2	37.6	45.2	24.0	65.3	31.1	79.7	54.9
Virginia	3.3	0.5	4.1	0.9	3.8	0.7	4.0	0.8	8.2	2.2
United States	18.1	5.7	20.6	7.7	20.8	5.4	26.1	7.1	31.6	12.0

Table 2.—Farm Cash Receipts From Cotton and Cottonseed as Percent of Total Farm Cash Receipts, for Specified States: 1924 to 1954

State	1924	1929	1934	1939	1944	1949	1954
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Alabama	71.8	74.7	72.4	45.8	47.7	42.3	35.3
Arizona	31.5	32.2	28.3	24.1	17.3	36.4	50.4
Arkansas	70.1	68.9	67.9	54.4	50.7	56.7	50.9
California	2.4	3.0	4.6	5.4	2.8	11.7	11.4
Florida	3.0	2.8	2.4	0.4	0.4	0.6	0.9
Georgia	62.0	58.7	58.3	35.2	28.6	23.7	21.3
Louisiana	45.8	53.2	48.2	35.6	31.1	34.3	32.3
Mississippi	77.5	78.2	76.3	67.2	70.2	67.9	60.6
Missouri	8.3	5.6	10.4	9.1	7.2	8.0	8.9
New Mexico	13.6	15.3	21.1	10.8	14.1	24.0	38.7
North Carolina	40.9	30.6	23.3	10.4	13.9	12.6	8.3
Oklahoma	52.0	40.2	30.9	14.6	14.2	12.8	9.9
South Carolina	69.8	64.4	62.1	46.8	44.8	34.4	31.1
Tennessee	29.0	30.6	32.1	19.6	21.8	24.8	23.7
Texas	70.2	52.9	51.2	30.7	23.6	37.8	38.0
Virginia	3.7	2.8	3.2	0.6	1.1	0.9	0.5
United States	16.2	13.4	13.6	8.0	7.5	9.5	9.0

Source: USDA, AMS Statistical Bulletin No. 186.

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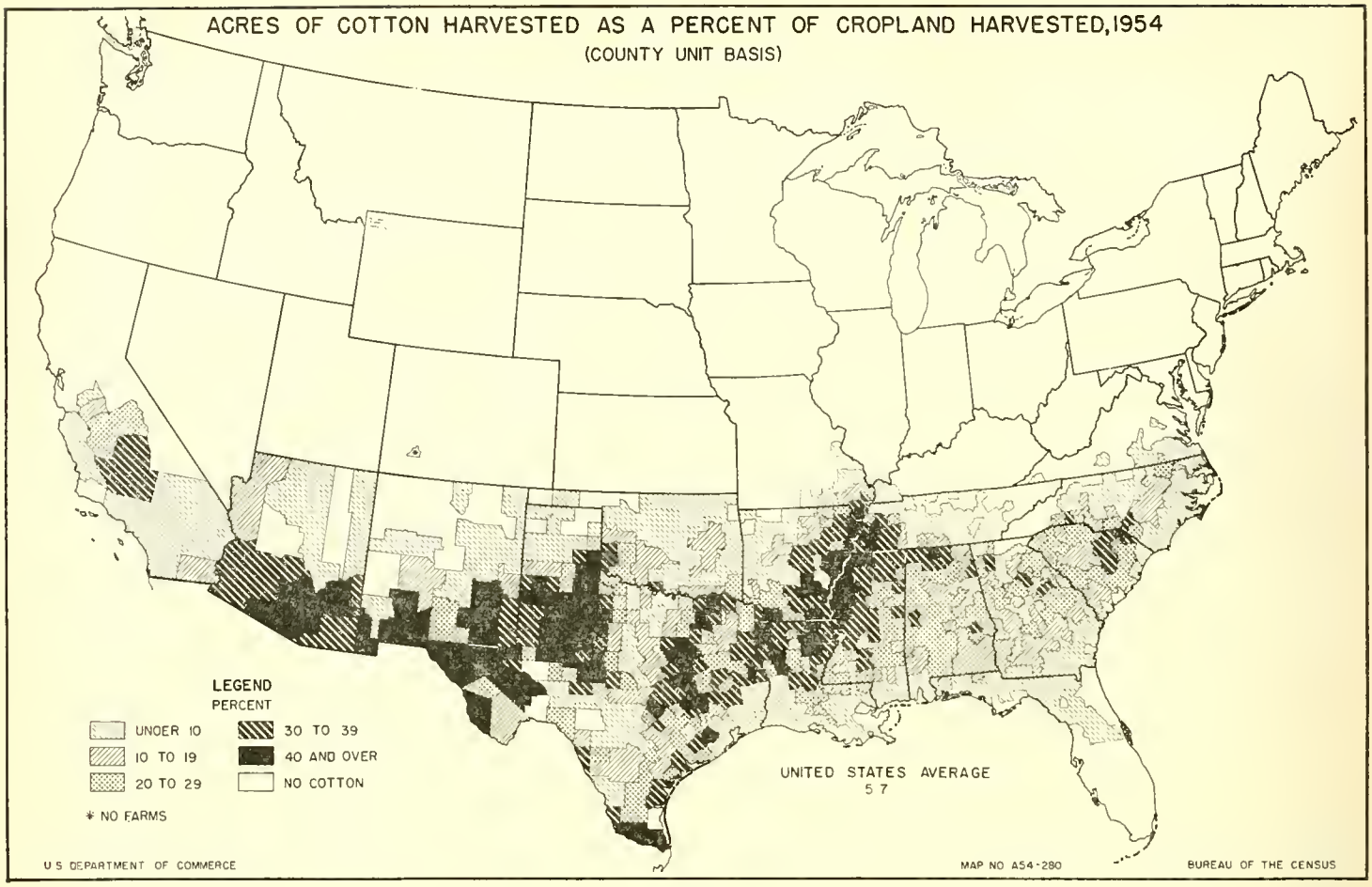

FIGURE 1.

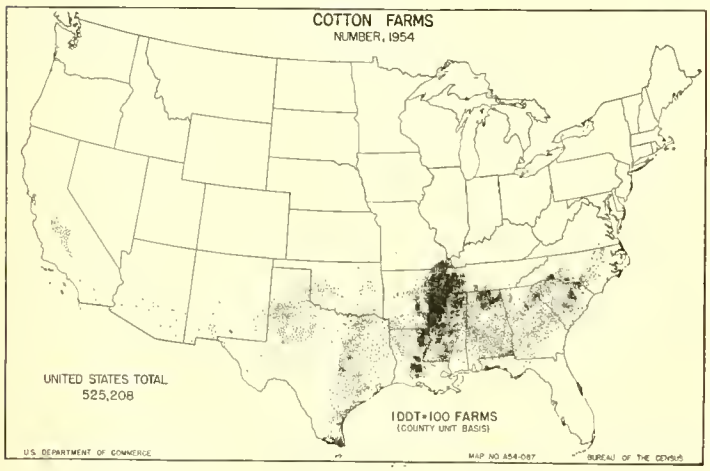

FIGURE 2.

SCOPE AND PURPOSE OF THIS REPORT

It would seem, therefore, that additional information concerning the economic structure, and the resource-use characteristics of this industry, and of the farms which comprise it, would be valuable to producers, consumers, handlers, and processors, and to those responsible for the planning and execution of governmental policy.

Data gathered by the Bureau of the Census have long been a mainstay of analyses of this type. The Agriculture Census of 1954 provided, for the first time, special tabulations of farm characteristics for type of farm, cross classified by economic class of farm. Census types of farms are delineated by the criterion of the commodity source of 50 percent or more of farm sales. One of the farm types so established is the cotton farm. This is a farm on which 50 percent or more of all sales are from cotton and cottonseed. The economic classes of farms used by Census since 1950 are volume or size-of-business groups classified according to the value of total sales of farm products. These groups range from Class I farms, having total sales of $25,000 or more, to Class VI farms which are characterized by sales of $250 to $1,199.

Analysis of the 1954 Census data made available, for selected subregions, by the special tabulations of data for cotton farms by economic class, sheds new light upon the economic structure and characteristics of the industry of cotton production and of the farms which comprise it.

Most of this report is concerned with these new data which have been supplemented by other statistics from the Bureau of the Census and other sources.

SUBREGIONS FOR WHICH SPECIAL TABULATIONS ARE AVAILABLE

The special tabulations for cotton farms by economic class were made for the 30 subregions in which cotton growing is of considerable importance. The location of these subregions and the distribution of cotton acreage in 1954 is shown in figure 3.

To facilitate the presentation and analysis of the new data the selected subregions were grouped into 10 regions (see fig. 4). Regions I through VI, extending from North Carolina to eastern Texas, comprise most of the humid area of cotton growing in this country. Moving west, Regions VII and VIII represent the bulk of production under subhumid climatic conditions. In Region IX is found the major part of cotton production under semiarid climatic conditions. Virtually all cotton grown in subregion 103 is found in the more southerly of the Texas counties included. Much of the crop in this region is irrigated from wells. Region X encompasses most of the cotton growing under irrigation in the arid southwest of Texas, New Mexico, and Arizona, and the arid San Joaquin Valley of California.

The six regions which comprise the humid climatic belt include some striking differences. The easternmost region (Region I) represents, in general, cotton production on the Eastern Coastal Plain of the United States. In some places in this region flue-cured tobacco and peanuts are more important crops than cotton. The region, in general, has larger reaches of level land than are to be found in either of the next two regions to the west.

Adjoining the Eastern Coastal Plain to the west is Region II, the Southern Piedmont. This region has some stretches of level land but in general it is hilly, and the characteristic fields are small and irregular in shape.

The next region to the west, Region III, can perhaps be described as midsouthern hilly, with some level land. This region has rather disparate areas within it. Examples are the Black Prairie (Black Belt) of Alabama and Mississippi, the Sand Mountain area of Alabama, the brown loam areas of Tennessee and Mississippi, and the sand-clay hills of Alabama, Mississippi, and Tennessee.

Immediately to the west of Region III lies the fabulous so-called "Delta"—the Alluvial Valley of the Mississippi and Red Rivers, extending from the "Boot Heel" of Missouri to the sugarcane country of southern Louisiana.

Region V is comprised mostly of the Western Sandy Coastal Plains of northeastern Texas, northwestern Louisiana, and southwestern Arkansas. It also includes the piney woods of eastern Texas and west central Louisiana, the so-called "Post Oak" area of east central Texas and the Arkansas River Valley and uplands of central Arkansas. It is in some respects the western counterpart of Region III.

The final region in the humid belt (Region VI) is coextensive with subregion 78. It is the Gulf Coast Prairie of Texas and Louisiana. Most of the cotton here is found in the Texas part; much of which is on the alluvial lands of the several streams that find their final passage to the Gulf through this region. The region includes, also, most of the specialized rice-growing farms of Texas and Louisiana. These are generally located on the heavy, rather poorly drained soils most typical of the region. Cotton and rice are not often grown on the same farms.

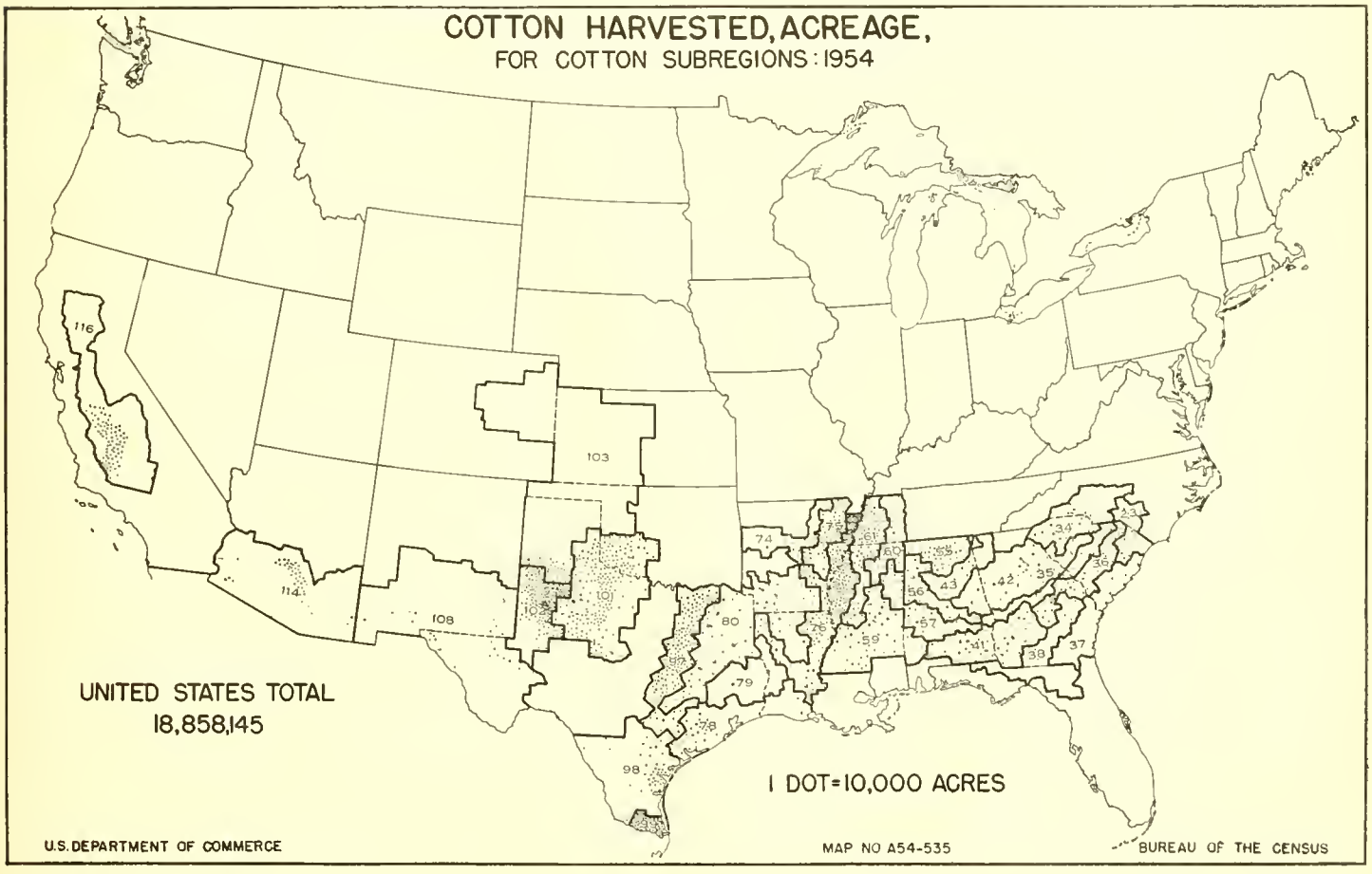

FIGURE 3.

FIGURE 4.

Regions VII and VIII, in the subhumid belt, are most dissimilar. The first named is composed of the Black Prairie of Texas, the Rio Grande Plains of southern Texas, and the rolling plains of west central Texas and southwestern Oklahoma. Region VIII is the lower Rio Grande Valley and has, in comparatively recent years, become a rather highly specialized cotton-growing area. Irrigation is general here but the water supply, mostly from the Rio Grande, is generally not adequate to permit irrigation of all land in cotton.

The final two regions (Regions IX and X) encompass, respectively, most of the cotton production under semiarid and arid climatic conditions.

In Region IX, most of the cotton is grown in the High Plains of Texas area. This area was developed for crop farming relatively late, and it's farms have always been characterized by relatively large areas of land and other resources per man. Supplemental irrigation from wells has become a very significant factor in the agriculture of the cotton-growing section of this region during the past 10 to 12 years.

In Region X, cotton is grown only under irrigation. Included in this region are the Trans-Pecos and upper Rio Grande cotton-producing areas of Texas, nearly all cotton-producing areas in New Mexico and Arizona, and the fabulous Central Valley of California.

The 30 subregions included in these 10 regions accounted, in the aggregate, for 94 percent of all cotton farms and for 97 percent of both the cotton acreage and production of cotton on such farms in 1954. During 1954, the 30 selected subregions accounted for about 95 to 98 percent of the national total of cotton farms and of cotton acreage and production on cotton farms for each economic class.

Thus, it seems reasonable to conclude that the cotton farms of the selected subregions are, in the aggregate, representative of all cotton farms in the United States. To a remarkable degree cotton growing is concentrated on farms that are classified as cotton farms. In 1954, for example, 61 percent of all farms reporting cotton, and 80 and 84 percent, respectively, of all cotton acreage and production were on these farms. So although most of the data in this report pertain specifically only to the cotton-farm type, it would seem that most of the aggregate conclusions indicated could be accepted as applying to the general industry of cotton production in the United States. This supposition is buttressed by several facts: (*1*) These subregions, in 1954, accounted for 68 percent of the number of commercial farms, other than cotton farms, that reported cotton, and for 80 percent of the cotton acreage and production found on these farms. (*2*) In that year approximately 90 percent of the noncommercial farms reporting cotton, and of the cotton acreage and production on these farms, were encompassed by the selected subregions.

Section 1.—COTTON PRODUCTION BY ECONOMIC CLASS AND TYPE OF FARM

THE NATIONAL PICTURE

Information on the distributions by economic class of the number of farms reporting a crop, the acreage harvested, and the production, contributes notably to our knowledge of the overall structure of that crop production. Such data show in a general way the location of production and acreage with respect to the size of the farm and they are indicative of the income level of the farmers who grow the crop.

Table 3 shows this type of information for all farms reporting cotton in the United States during 1949 and 1954. Of the number of commercial farms reporting cotton, there was a considerable concentration in Classes V and VI in both 1949 and 1954. These classes, together with noncommercial farms, accounted for more than 60 percent of farms reporting cotton in 1954 and for more than 70 percent in 1949. This means that in 1954 three-fifths of the farm operators growing cotton had gross farm sales of less than $2,500. As the noncommercial farms are presumed not to be primarily dependent upon agriculture for their income, this indicated low gross income from farming may not be important to them. But the large number of cotton producers found in Economic Classes V and VI does suggest that there is a concentration of farmers with low incomes from farming among the cotton farms. For all farms, the proportions classified as Classes V and VI were 30.1 in 1949 and 25.7 in 1954. It is thus evident that the concentration of these low-production commercial farms was almost twice as large among farms reporting cotton as among all farms, in both years.

An additional fact of interest is the significant decrease from 1949 to 1954 in the proportion that Economic Class VI and noncommercial farms were of all farms reporting cotton. These decreases were accompanied by significant increases for 1954 over 1949 in the proportions of all cotton-reporting farms in Economic Classes I through IV.

There was considerably less concentration of acreage and production on these low-production commercial and noncommercial farms. The striking fact in table 3 about acreage and production is their concentration, relative to numbers of farms reporting, on Economic Class I and Class II farms. The distributions of farms reporting cotton, cotton acreage, and cotton production by type of farm for the United States are shown in table 4 for 1949 and 1954. Cotton farms account for a preponderance of farms reporting, acres, and production in both years.

Other field-crop farms accounted for a much larger proportion of the farms growing cotton than any other commercial type largely because of a concentration of tobacco and peanut farms in parts of the Carolinas, Georgia, and Alabama, where the growing of cotton is also prevalent.

Perhaps the single outstanding fact brought out by the distributions in table 4 is that for more than a fourth of the commercial farms reporting, cotton is not the major source of farm income. These farms harvested about 16 percent of all cotton acreage in 1954 and accounted for about 14 percent of total cotton production.

The data in table 3 for economic class of farm reporting cotton are for all types of farms, while the data by type shown in table 4 are

TABLE 3.—PERCENT DISTRIBUTION OF FARMS REPORTING COTTON, ACRES OF COTTON HARVESTED, AND BALES OF COTTON PRODUCED, BY ECONOMIC CLASS OF FARM, FOR THE UNITED STATES: 1954 AND 1949

Item and year	All farms	Commercial farms by economic class							Noncommercial farms			
		Total	I	II	III	IV	V	VI	Total	Part-time	Residential	Abnormal
Farms reporting:												
1954	100.0	84.8	2.5	4.8	10.0	21.7	28.0	17.8	15.2	11.1	4.1	(Z)
1949	100.0	80.5	1.4	3.5	6.8	15.8	26.2	26.8	19.5	12.4	7.1	(Z)
Acres of cotton harvested:												
1954	100.0	96.1	23.3	16.3	16.1	19.1	15.5	5.7	3.9	3.2	0.6	0.2
1949	100.0	94.1	18.9	17.2	14.9	15.9	16.3	10.9	5.9	4.4	1.5	0.1
Bales of cotton produced:												
1954	100.0	97.5	37.8	14.8	12.8	15.9	12.5	3.7	2.5	2.0	0.3	0.2
1949	100.0	96.6	28.1	18.2	14.0	14.7	14.7	7.0	3.4	2.7	0.5	0.1

Z 0.05 percent or less.

TABLE 4.—PERCENT DISTRIBUTION OF FARMS REPORTING COTTON, ACRES OF COTTON HARVESTED, AND BALES OF COTTON PRODUCED, BY TYPE OF FARM, FOR THE UNITED STATES: 1954 AND 1949

Item and year	All farms	Type of commercial farm													Noncommercial farms			
		Total	Cash-grain	Cotton	Other field-crop	Vegetable	Fruit-and-nut	Dairy	Poultry	Other livestock	General farms			Miscellaneous	Total	Part-time	Residential	Abnormal
											Crop	Livestock	Crop and livestock					
Farms reporting:																		
1954	100.0	84.8	1.7	60.9	10.0	0.2	0.2	1.5	0.8	2.5	3.6	0.2	3.1	0.2	15.2	11.1	4.1	(Z)
1949	100.0	80.5	0.8	54.9	11.5	0.3	0.2	1.2	0.7	2.7	3.3	0.3	4.0	0.4	19.5	12.4	7.1	(Z)
Acres of cotton harvested:																		
1954	100.0	96.1	2.8	79.8	3.0	0.3	0.2	1.0	0.4	2.2	3.8	0.1	2.5	0.1	3.9	3.2	0.6	0.2
1949	100.0	94.1	1.0	79.9	4.0	0.2	0.2	0.8	0.3	1.9	2.8	0.1	2.7	0.2	5.9	4.4	1.5	0.1
Bales of cotton produced:																		
1954	100.0	97.5	1.8	83.8	3.1	0.5	0.3	0.9	0.3	1.4	3.8	(Z)	1.6	0.1	2.5	2.0	0.3	0.2
1949	100.0	96.6	0.9	85.0	3.2	0.2	0.2	0.7	0.2	1.3	2.6	0.1	2.0	0.1	3.4	2.7	0.5	0.1

Z 0.05 percent or less.

for all commercial farms. For each economic class, cotton farms account for a preponderance of farms growing the crop, and even larger proportions of the acreage and production.

TABLE 5.—FARMS REPORTING COTTON, ACRES OF COTTON HARVESTED, AND COTTON PRODUCTION FOR COTTON FARMS AS A PERCENTAGE OF THE TOTAL FOR ALL COMMERCIAL FARMS REPORTING COTTON, FOR EACH ECONOMIC CLASS OF FARM, FOR THE UNITED STATES: 1954

Item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
Farms reporting	72	71	62	54	62	78	88
Acres harvested	83	86	81	79	80	87	91
Bales harvested	86	86	85	81	84	91	94

THE PICTURE BY REGIONS

Data for the selected regions of this study which show the total number of farms, the number of farms reporting cotton, acres of cotton harvested, and bales of cotton produced, by economic class of farm and by type of farm are particularly useful in indicating the characteristics of cotton production. They make discernible a reasonably clear picture of: (*1*) The nature of the diverse agricultural economies in which cotton growing is carried on; (*2*) the role and relative importance of the cotton enterprise in the several regions and on different types of farms; (*3*) the structure, with respect to size of business, of the cotton-production industry in the regions.

Information of this kind for economic class of commercial farms and for types of noncommercial farms is shown in table 6.

The data relating to the number, and proportion, of all farms reporting cotton indicate the relative importance of cotton production in the agriculture of the region and show the relative importance of the enterprise to different size-of-business groups.

In Regions I, II, and III, the three humid regions east of the Mississippi River, cotton is grown on 74, 64, and 87 percent, respectively, of all commercial farms. This leaves little doubt that in these regions it is an extremely important enterprise. An examination of the proportions of the economic classes of commercial farms that report cotton presents some interesting implications. For example, in Region II, where 64 percent of all commercial farms report cotton, only about one-fourth of Economic Class I and Class II farms grow cotton, and only slightly more than one-third of Class III farms report the crop. To a less pronounced degree the same situation prevails in Region III. In Region I abont the same proportion of Class III farms report cotton as of all commercial farms. But here too, smaller proportions of Economic Classes I and II farms report cotton than the proportion of all farms reporting cotton.

It is noteworthy that a larger proportion of the large farms in these areas do not grow cotton. Particularly for Regions II and III the general characteristics of the topography, and the effects of this upon the practicability of adopting labor-saving methods suggest that many of the larger farms may not find cotton as profitable as other enterprises. In this connection, data of table 7 show that in Regions I and II a large majority of the farms in Classes I through III that report cotton are not cotton farms. These same data reveal that in Region III where 89 percent of all commercial farms that report cotton are cotton farms, a majority of the farms reporting cotton in Classes I and II are not cotton farms.

A somewhat similar situation with respect to the proportions of farms in different economic classes that report cotton is found in

TABLE 6.—NUMBER OF FARMS, FARMS REPORTING COTTON, AND ACRES AND BALES OF COTTON HARVESTED, FOR COMMERCIAL FARMS, BY ECONOMIC CLASS AND FOR NONCOMMERCIAL FARMS, BY REGIONS: 1954

Region and item	All farms	Commercial farms by economic class							Noncommercial farms			
		Total	I	II	III	IV	V	VI	Total	Part-time	Residential	Abnormal
REGION I												
All farms, number	223,910	160,682	1,784	6,087	20,608	51,288	51,172	29,743	63,228	25,919	37,230	79
Percent distribution	100.0	71.8	0.8	2.7	9.2	22.9	22.9	13.3	28.2	11.6	16.6	(Z)
Farms reporting cotton, number	135,573	118,761	988	3,898	15,404	40,640	38,267	19,564	16,812	12,132	4,671	9
Percent of all farms	60.5	73.9	55.4	64.0	74.7	79.2	74.8	65.8	26.6	46.8	12.5	11.4
Percent distribution	100.0	87.6	0.7	2.9	11.4	30.0	28.2	14.4	12.4	8.9	3.5	(Z)
Acres of cotton harvested	1,580,374	1,508,759	109,658	161,345	280,983	485,708	349,322	121,743	71,615	60,087	11,132	396
Percent distribution	100.0	95.5	6.9	10.2	17.8	30.7	22.1	7.7	4.5	3.8	0.7	(Z)
Bales of cotton harvested	986,051	951,156	73,797	108,919	195,394	317,832	196,938	58,276	34,895	30,025	4,616	254
Percent distribution	100.0	96.5	7.5	11.0	19.8	32.2	20.0	5.9	3.5	3.0	0.5	(Z)
REGION II												
All farms, number	169,464	77,232	1,115	4,349	7,064	12,266	26,174	26,264	92,232	31,968	60,179	85
Percent distribution	100.0	45.6	0.7	2.6	4.2	7.2	15.4	15.5	54.4	18.9	35.5	(Z)
Farms reporting cotton, number	72,282	49,708	273	1,118	2,463	7,127	19,023	19,704	22,574	17,407	5,145	22
Percent of all farms	42.7	64.4	24.5	25.7	34.9	58.1	72.7	75.0	24.5	54.5	8.5	25.9
Percent distribution	100.0	68.8	0.4	1.5	3.4	9.9	26.3	27.3	31.2	24.1	7.1	(Z)
Acres of cotton harvested	692,432	579,074	13,770	30,955	46,426	124,512	228,017	135,394	113,358	98,914	14,215	229
Percent distribution	100.0	83.6	2.0	4.5	6.7	18.0	32.9	19.6	16.4	14.3	2.1	(Z)
Bales of cotton harvested	388,460	334,151	9,171	19,313	29,593	77,767	131,563	66,744	54,309	49,124	5,060	125
Percent distribution	100.0	86.0	2.4	5.0	7.6	20.0	33.9	17.2	14.0	12.6	1.4	(Z)
REGION III												
All farms, number	357,989	220,384	1,723	5,723	13,102	42,392	83,955	73,489	137,605	52,958	84,584	63
Percent distribution	100.0	61.6	0.5	1.6	3.7	11.8	23.5	20.5	38.2	14.7	23.5	(Z)
Farms reporting cotton, number	239,490	192,080	953	3,398	9,899	37,882	76,856	63,092	47,410	33,806	13,590	14
Percent of all farms	66.9	87.2	55.3	59.4	75.6	89.4	91.5	85.9	34.5	63.8	16.1	22.2
Percent distribution	100.0	80.2	0.4	1.4	4.1	15.8	32.1	26.3	19.8	14.1	5.7	(Z)
Acres of cotton harvested	2,507,604	2,324,630	122,869	150,780	252,504	629,820	790,406	378,251	182,974	152,016	29,905	1,053
Percent distribution	100.0	92.7	4.9	6.0	10.1	25.1	31.5	15.1	7.2	6.1	1.2	(Z)
Bales of cotton harvested	1,799,588	1,693,480	110,222	119,408	208,879	497,088	552,557	205,326	106,108	92,113	13,310	685
Percent distribution	100.0	94.1	6.1	6.6	11.6	27.6	30.7	11.4	5.9	5.1	0.7	(Z)

Z 0.05 percent or less.

TABLE 6.—NUMBER OF FARMS, FARMS REPORTING COTTON, AND ACRES AND BALES OF COTTON HARVESTED, FOR COMMERCIAL FARMS, BY ECONOMIC CLASS AND FOR NONCOMMERCIAL FARMS, BY REGIONS: 1954—Continued

Region and item	All farms	Commercial farms by economic class							Noncommercial farms			
		Total	I	II	III	IV	V	VI	Total	Part-time	Residential	Abnormal
REGION IV												
All farms, number	174,753	145,977	4,979	8,898	17,937	39,321	54,397	20,445	28,776	11,740	17,000	36
Percent distribution	100.0	83.5	2.8	5.1	10.3	22.5	31.1	11.7	16.5	6.7	9.7	(Z)
Farms reporting cotton, number	143,524	135,411	3,821	7,267	16,657	37,743	52,301	17,622	8,113	6,535	1,566	12
Percent of all farms	82.1	92.8	76.7	81.7	92.9	96.0	96.1	86.2	28.2	55.7	9.2	33.3
Percent distribution	100.0	94.3	2.7	5.1	11.6	26.3	36.4	12.3	5.7	4.6	1.1	(Z)
Acres of cotton harvested	3,197,922	3,145,532	770,786	449,761	533,502	688,036	580,997	122,450	52,390	38,925	5,190	8,275
Percent distribution	100.0	98.4	24.1	14.1	16.7	21.5	18.2	3.8	1.7	1.2	0.2	0.3
Bales of cotton harvested	2,747,257	2,717,741	752,151	399,604	473,033	585,325	440,459	67,169	29,516	20,410	1,611	7,495
Percent distribution	100.0	98.9	27.4	14.5	17.2	21.3	16.0	2.4	1.0	0.7	(Z)	0.3
REGION V												
All farms, number	150,257	57,109	962	3,329	6,019	9,014	17,083	20,702	93,148	31,859	61,265	24
Percent distribution	100.0	38.0	0.6	2.2	4.0	6.0	11.4	13.8	62.0	21.2	40.8	(Z)
Farms reporting cotton, number	47,102	31,651	374	1,129	2,775	5,465	10,305	11,603	15,451	9,749	5,695	7
Percent of all farms	31.3	55.4	38.9	33.9	46.1	60.6	60.3	56.0	16.6	30.6	9.3	2.9
Percent distribution	100.0	67.2	0.8	2.4	5.9	11.6	21.9	24.6	32.8	20.7	12.1	(Z)
Acres of cotton harvested	811,339	711,278	85,359	80,329	110,436	155,139	176,122	103,893	100,061	74,775	23,870	1,416
Percent distribution	100.0	87.7	10.5	9.9	13.6	19.1	21.7	12.8	12.2	9.2	2.9	0.1
Bales of cotton harvested	333,306	307,236	62,407	40,940	51,425	62,344	61,831	28,289	26,070	19,525	5,455	1,090
Percent distribution	100.0	92.2	18.7	12.3	15.4	18.7	18.6	8.5	7.8	5.9	1.6	0.3
REGION VI												
All farms, number	33,654	19,589	2,364	2,866	3,398	4,170	3,809	2,982	14,065	4,802	9,256	7
Percent distribution	100.0	58.2	7.0	8.5	10.1	12.4	11.3	8.9	41.8	14.3	27.5	(Z)
Farms reporting cotton, number	10,517	9,456	275	895	2,034	2,859	2,183	1,210	1,061	800	255	6
Percent of all farms	31.3	48.3	11.6	31.2	59.9	68.6	57.3	40.6	7.5	16.7	2.8	85.7
Percent distribution	100.0	89.9	2.6	8.5	19.3	27.2	20.8	11.5	10.1	7.6	2.4	(Z)
Acres of cotton harvested	295,655	282,096	43,848	69,089	77,120	57,380	26,214	8,445	13,559	4,530	705	8,324
Percent distribution	100.0	95.4	14.8	23.4	26.1	19.4	8.9	2.9	4.6	1.5	0.3	2.8
Bales of cotton harvested	214,047	201,363	33,534	51,399	56,825	40,081	15,614	3,910	12,684	2,075	280	10,329
Percent distribution	100.0	94.1	15.7	24.0	26.5	18.7	7.3	1.8	5.9	1.0	0.1	4.8
REGION VII												
All farms, number	129,347	94,900	2,918	10,494	18,764	26,204	24,289	12,231	34,447	16,559	17,868	20
Percent distribution	100.0	73.4	2.3	8.1	14.5	20.4	18.8	9.5	26.6	12.8	13.8	(Z)
Farms reporting cotton, number	73,873	67,378	1,868	7,561	14,540	20,545	16,598	6,266	6,495	5,196	1,296	3
Percent of all farms	57.1	71.0	64.0	72.2	77.5	78.4	68.3	51.2	18.9	31.4	7.3	15.0
Percent distribution	100.0	91.2	2.5	10.2	19.7	27.8	22.5	8.5	8.8	7.0	1.8	(Z)
Acres of cotton harvested	4,194,710	4,097,763	457,461	923,182	1,126,042	992,309	489,467	109,302	96,947	85,895	7,878	3,174
Percent distribution	100.0	97.7	10.9	22.0	26.8	23.7	11.7	2.6	2.3	2.0	0.2	0.1
Bales of cotton harvested	1,285,179	1,269,085	275,358	318,368	313,137	240,810	102,402	19,010	16,094	14,212	1,195	687
Percent distribution	100.0	98.7	21.4	24.8	24.4	18.7	8.0	1.5	1.2	1.1	0.1	(Z)
REGION VIII												
All farms, number	7,779	6,286	1,067	1,493	1,287	1,071	927	441	1,493	692	796	5
Percent distribution	100.0	80.8	13.7	19.2	16.5	13.8	11.9	5.7	19.1	8.9	10.2	(Z)
Farms reporting cotton, number	6,163	5,747	1,027	1,444	1,243	962	791	280	416	386	30	----------
Percent of all farms	79.7	91.4	96.3	96.8	96.6	89.8	85.3	63.5	27.9	55.8	3.8	----------
Percent distribution	100.0	93.2	16.7	23.4	20.2	15.6	12.8	4.5	6.8	6.3	0.5	----------
Acres of cotton harvested	448,047	445,335	248,104	110,190	53,372	20,898	10,446	2,325	2,712	2,607	105	----------
Percent distribution	100.0	99.4	55.4	24.6	11.9	4.7	2.3	0.5	0.6	0.6	(Z)	----------
Bales of cotton harvested	396,452	395,108	234,819	97,876	40,012	14,594	6,672	1,135	1,344	1,304	40	----------
Percent distribution	100.0	99.7	59.2	24.7	10.1	3.7	1.7	0.3	0.3	0.3	(Z)	----------
REGION IX												
All farms, number	78,374	70,755	8,300	18,864	18,225	14,076	8,452	2,838	7,619	3,749	3,820	50
Percent distribution	100.0	90.3	10.6	24.1	23.3	18.0	10.8	3.6	9.7	4.8	4.9	(Z)
Farms reporting cotton, number	18,125	17,845	4,878	6,742	2,922	2,084	1,044	175	280	255	20	5
Percent of all farms	23.2	25.2	58.8	35.7	16.0	14.8	12.4	6.2	3.7	6.8	(Z)	10.0
Percent distribution	100.0	98.5	26.9	37.2	16.1	11.5	5.8	1.0	1.5	1.4	0.1	(Z)
Acres of cotton harvested	2,286,957	2,281,822	1,085,448	796,839	248,358	107,138	40,954	3,085	5,135	4,590	195	350
Percent distribution	100.0	99.8	47.5	34.8	10.9	4.7	1.8	0.1	0.2	0.2	(Z)	(Z)
Bales of cotton harvested	1,404,491	1,403,496	848,469	437,073	82,871	27,360	7,013	710	995	730	15	250
Percent distribution	100.0	99.9	60.4	31.1	5.9	1.9	0.5	0.1	0.1	0.1	(Z)	(Z)
REGION X												
All farms, number	67,292	53,396	12,515	12,636	11,441	8,604	6,416	1,784	13,896	5,885	7,938	73
Percent distribution	100.0	79.3	18.6	18.8	17.0	12.8	9.5	2.7	20.6	8.7	11.8	0.1
Farms reporting cotton, number	15,653	15,322	5,997	4,083	2,630	1,660	751	201	331	275	30	26
Percent of all farms	23.3	28.7	47.9	32.3	23.0	19.3	11.7	11.3	2.7	4.7	0.4	35.6
Percent distribution	100.0	97.9	38.3	26.1	16.8	10.6	4.8	1.3	2.1	1.8	0.2	0.1
Acres of cotton harvested	1,515,865	1,508,355	1,266,867	158,146	54,084	21,824	6,279	1,155	7,510	1,155	30	6,325
Percent distribution	100.0	99.5	83.6	10.4	3.6	1.4	0.4	0.1	0.5	0.1	(Z)	0.4
Bales of cotton harvested	2,619,438	2,609,709	2,269,282	234,309	72,012	25,829	7,210	1,067	9,729	1,080	30	8,619
Percent distribution	100.0	99.6	86.6	8.9	2.7	1.0	0.3	(Z)	0.3	(Z)	(Z)	0.3
TOTAL, 10 REGIONS												
All farms, number	1,392,819	906,310	37,727	74,739	117,845	208,406	276,674	190,919	486,509	186,131	299,936	442
Percent distribution	100.0	65.1	2.7	5.4	8.5	15.0	19.9	13.7	34.9	13.4	21.5	(Z)
Farms reporting cotton, number	762,302	643,359	20,454	37,535	70,567	156,967	218,119	139,717	118,943	86,541	32,298	104
Percent of all farms	54.7	71.0	54.2	50.2	59.9	75.3	78.8	73.2	24.5	46.5	10.8	23.5
Percent distribution	100.0	84.4	2.7	4.9	9.3	20.6	28.6	18.3	15.6	11.4	4.2	(Z)
Acres of cotton harvested	17,530,905	16,884,644	4,204,170	2,930,616	2,782,827	3,282,764	2,698,224	986,043	646,261	523,494	93,225	29,542
Percent distribution	100.0	96.3	24.0	16.7	15.9	18.7	15.4	5.6	3.8	3.1	0.6	0.1
Bales of cotton harvested	12,174,269	11,882,525	4,669,210	1,827,209	1,523,181	1,889,030	1,522,259	451,636	291,744	230,598	31,612	29,534
Percent distribution	100.0	97.6	38.3	15.0	12.5	15.5	12.5	3.7	2.4	1.9	0.3	0.2

Z 0.05 percent or less.

Regions V and VI. The general explanation offered for Regions II and III would seem to be valid also for Region V. In Region VI it is probable that the smaller proportion of the larger farms reporting cotton stems largely from the prevalence of large-scale rice (cash-grain) farms, for, generally speaking, they do not grow cotton. The situation for this region is probably similar to that in Region I, where, in general, the topography facilitates the adoption of modern mechanized methods. The prevalence in Region I of farms with large tobacco- and peanut-acreage allotments probably explains the preponderance of noncotton farms among the larger farms that report cotton, as well as the smaller-than-average proportions of Class I and Class II farms that report cotton.

The remaining region of the humid belt, the Alluvial Valley of the Mississippi and Red Rivers (the "Delta"), Region IV, is one of the most highly specialized cotton-production regions in the world. Table 6 shows that 93 percent of all commercial farms in the region report cotton. Table 7 shows that the vast majority of these farms in all economic classes are cotton farms. The somewhat smaller proportions—three-fourths and four-fifths respectively—of Class I and Class II farms that report cotton are no doubt due to the inclusion within the region of a relatively small area that has many specialized rice farms.

Region VII comprises most of the subhumid belt of cotton production. Here 71 percent of all commercial farms report cotton and, except for Class VI farms, each economic class shows about or slightly above the all-farm percentage reporting cotton. Fewer Class VI farms report cotton than the average for all commercial farms.

Region VIII, the Lower Rio Grande Valley of Texas, is by far the smallest in point of area. It ranks with Region IV and the cotton-growing parts of Regions IX and X, however, as one of the most highly specialized cotton-producing regions of the country. More than 90 percent of all commercial farms here grow cotton, and the percentage of farms in Classes I, II, and III that report cotton is higher than that for all commercial farms. Table 7 shows that around 90 percent or more of the farms reporting cotton for each economic class are cotton farms. These facts suggest that this region has a strong comparative advantage for cotton.

TABLE 7.—DISTRIBUTION BETWEEN COTTON FARMS AND COMMERCIAL FARMS OTHER THAN COTTON FARMS, OF FARMS REPORTING, ACRES HARVESTED, AND PRODUCTION OF COTTON ON COMMERCIAL FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Farms reporting cotton harvested:							
All commercial farms—number	118,761	988	3,898	15,404	40,640	38,267	19,564
Cotton farms—percent	48.3	29.1	31.7	28.6	36.6	54.5	80.5
Other commercial farms—percent	51.7	70.9	68.3	71.4	63.4	45.5	19.5
Acres of cotton harvested:							
All commercial farms—acres	1,508,759	109,658	161,345	280,983	485,708	349,322	121,743
Cotton farms—percent	62.7	58.8	56.6	51.6	59.0	72.3	87.7
Other commercial farms—percent	37.3	41.2	43.4	48.4	41.0	27.7	12.3
Bales of cotton produced:							
All commercial farms—bales	951,156	73,797	108,919	195,394	317,832	196,938	58,276
Cotton farms—percent	62.6	59.7	57.0	52.2	59.9	73.4	89.7
Other commercial farms—percent	37.4	40.3	43.0	47.8	40.1	26.6	10.3
REGION II							
Farms reporting cotton harvested:							
All commercial farms—number	49,708	273	1,118	2,463	7,127	19,023	19,704
Cotton farms—percent	81.0	8.4	16.1	30.3	67.4	84.3	93.8
Other commercial farms—percent	19.0	91.6	83.9	69.7	32.6	15.7	6.2
Acres of cotton harvested:							
All commercial farms—acres	579,074	13,770	30,955	46,426	124,512	228,017	135,394
Cotton farms—percent	86.3	36.6	48.2	63.3	85.9	93.0	97.0
Other commercial farms—percent	13.7	63.4	51.8	36.7	14.1	7.0	3.0
Bales of cotton produced:							
All commercial farms—bales	334,151	9,171	19,313	29,593	77,767	131,563	66,744
Cotton farms—percent	86.0	37.5	50.4	65.0	86.6	93.4	97.2
Other commercial farms—percent	14.0	62.5	49.6	35.0	13.4	6.6	2.8
REGION III							
Farms reporting cotton harvested:							
All commercial farms—number	192,080	953	3,398	9,899	37,882	76,856	63,092
Cotton farms—percent	89.1	49.8	49.2	69.6	86.4	90.8	94.5
Other commercial farms—percent	10.9	50.2	50.8	30.4	13.6	9.2	5.5
Acres of cotton harvested:							
All commercial farms—acres	2,324,630	122,869	150,780	252,504	629,820	790,406	378,251
Cotton farms—percent	92.2	80.8	77.6	86.5	93.3	95.5	97.1
Other commercial farms—percent	7.8	19.2	22.4	13.5	6.7	4.5	2.9
Bales of cotton produced:							
All commercial farms—bales	1,693,480	110,222	119,408	208,879	497,088	552,557	205,326
Cotton farms—percent	92.8	83.4	79.6	88.0	94.3	96.1	97.6
Other commercial farms—percent	7.2	16.6	20.4	12.0	5.7	3.9	2.4
REGION IV							
Farms reporting cotton harvested:							
All commercial farms—number	135,411	3,821	7,267	16,657	37,743	52,301	17,622
Cotton farms—percent	94.6	78.3	82.0	90.5	94.9	97.3	98.1
Other commercial farms—percent	5.4	21.7	18.0	9.5	5.1	2.7	1.9
Acres of cotton harvested:							
All commercial farms—acres	3,145,532	770,786	449,761	533,502	688,036	580,997	122,450
Cotton farms—percent	95.3	91.5	91.8	95.4	97.8	99.3	98.6
Other commercial farms—percent	4.7	8.5	8.2	4.6	2.2	0.7	1.4
Bales of cotton produced:							
All commercial farms—bales	2,717,741	752,151	399,604	473,033	585,325	440,459	67,169
Cotton farms—percent	95.5	92.2	92.8	96.2	97.7	99.1	99.2
Other commercial farms—percent	4.5	7.8	7.2	3.8	2.3	0.9	0.8

TABLE 7.—DISTRIBUTION BETWEEN COTTON FARMS AND COMMERCIAL FARMS OTHER THAN COTTON FARMS, OF FARMS REPORTING, ACRES HARVESTED, AND PRODUCTION OF COTTON ON COMMERCIAL FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION V							
Farms reporting cotton harvested:							
All commercial farms—number	31,651	374	1,129	2,775	5,465	10,305	11,603
Cotton farms—percent	70.3	57.0	48.9	54.8	67.2	69.8	78.5
Other commercial farms—percent	29.7	43.0	51.1	45.2	32.8	30.2	21.5
Acres of cotton harvested:							
All commercial farms—acres	711,278	85,359	80,329	110,436	155,139	176,122	103,893
Cotton farms—percent	80.9	82.3	72.3	78.2	81.3	82.7	85.7
Other commercial farms—percent	19.1	17.7	27.7	21.8	18.7	17.3	14.3
Bales of cotton produced:							
All commercial farms—bales	307,236	62,407	40,940	51,425	62,344	61,831	28,289
Cotton farms—percent	85.5	86.9	79.3	84.1	86.4	87.2	88.7
Other commercial farms—percent	14.5	13.1	20.7	15.9	13.6	12.8	11.3
REGION VI							
Farms reporting cotton harvested:							
All commercial farms—number	9,456	275	895	2,034	2,859	2,183	1,210
Cotton farms—percent	84.5	61.1	86.1	87.3	83.8	83.2	88.0
Other commercial farms—percent	15.5	38.9	13.6	12.7	16.2	16.8	12.0
Acres of cotton harvested:							
All commercial farms—acres	282,096	43,818	69,089	77,120	57,380	26,214	8,445
Cotton farms—percent	91.4	78.7	94.5	95.6	92.2	90.6	91.9
Other commercial farms—percent	8.6	21.3	5.5	4.1	7.8	9.4	8.1
Bales of cotton produced:							
All commercial farms—bales	201,363	33,534	51,399	56,825	40,081	15,614	3,910
Cotton farms—percent	92.7	80.8	95.4	95.9	94.2	93.2	94.7
Other commercial farms—percent	7.3	19.2	4.6	4.1	5.8	6.8	5.3
REGION VII							
Farms reporting cotton harvested:							
All commercial farms—number	67,378	1,868	7,561	14,540	20,545	16,598	6,266
Cotton farms—percent	66.7	63.9	58.7	65.1	67.2	68.5	74.4
Other commercial farms—percent	33.3	36.1	41.3	34.9	32.8	31.5	25.6
Acres of cotton harvested:							
All commercial farms—acres	4,097,763	457,461	923,182	1,126,042	992,309	489,467	109,302
Cotton farms—percent	78.2	77.9	73.8	79.5	79.2	81.3	82.0
Other commercial farms—percent	21.8	22.1	26.2	20.5	20.8	18.7	18.0
Bales of cotton produced:							
All commercial farms—bales	1,269,085	275,358	318,368	313,137	240,810	102,402	19,010
Cotton farms—percent	83.2	85.0	80.5	83.8	82.9	85.2	85.8
Other commercial farms—percent	16.8	15.0	19.5	16.2	17.1	14.8	14.2
REGION VIII							
Farms reporting cotton harvested:							
All commercial farms—number	5,747	1,027	1,444	1,243	962	791	280
Cotton farms—percent	92.2	88.9	90.5	91.9	94.7	95.6	96.4
Other commercial farms—percent	7.8	11.1	9.5	8.1	5.3	4.4	3.6
Acres of cotton harvested:							
All commercial farms—acres	445,335	248,104	110,190	53,372	20,898	10,446	2,325
Cotton farms—percent	94.8	91.5	95.3	95.1	95.5	92.9	97.8
Other commercial farms—percent	5.2	5.5	4.7	4.9	4.5	7.1	2.2
Bales of cotton produced:							
All commercial farms—bales	395,108	234,819	97,876	40,012	14,594	6,672	1,135
Cotton farms—percent	95.6	94.7	96.6	97.3	96.9	98.0	96.5
Other commercial farms—percent	4.4	5.3	3.4	2.7	3.1	2.0	3.5
REGION IX							
Farms reporting cotton harvested:							
All commercial farms—number	17,845	4,878	6,742	2,922	2,084	1,044	175
Cotton farms—percent	82.1	86.0	86.0	80.2	69.0	73.8	60.0
Other commercial farms—percent	17.9	14.0	14.0	19.8	31.0	26.2	40.0
Acres of cotton harvested:							
All commercial farms—acres	2,281,822	1,085,448	796,839	248,358	107,133	40,951	3,085
Cotton farms—percent	92.3	93.0	92.9	91.8	84.3	88.3	57.5
Other commercial farms—percent	7.7	7.0	7.1	8.2	15.7	11.7	42.5
Bales of cotton produced:							
All commercial farms—bales	1,403,496	848,469	437,073	82,871	27,360	7,013	710
Cotton farms—percent	93.1	93.0	93.9	92.6	86.3	89.3	44.4
Other commercial farms—percent	6.9	7.0	6.1	7.4	13.7	10.7	55.6
REGION X							
Farms reporting cotton harvested:							
All commercial farms—number	15,322	5,997	4,083	2,630	1,660	751	201
Cotton farms—percent	77.4	75.1	75.1	77.4	83.7	90.0	94.5
Other commercial farms—percent	22.6	24.9	24.9	22.6	16.3	10.0	5.5
Acres of cotton harvested:							
All commercial farms—acres	1,508,355	1,266,867	158,146	54,084	21,824	6,279	1,155
Cotton farms—percent	85.0	84.7	86.3	85.6	90.9	86.8	77.1
Other commercial farms—percent	15.0	15.3	13.7	14.4	9.1	13.2	22.9
Bales of cotton produced:							
All commercial farms—bales	2,609,709	2,269,282	234,309	72,012	25,829	7,210	1,067
Cotton farms—percent	85.2	84.9	86.8	87.2	93.1	85.0	76.9
Other commercial farms—percent	14.8	15.1	13.2	12.8	6.9	15.0	23.1

Region IX contains most of the semiarid area of the United States where cotton is produced. Most of the cotton in the region is found in subregion 102, the High Plains cotton area of Texas. A much smaller proportion of the total for the region is found in the southerly Texas counties of subregion 103, although in most of this subregion no cotton is grown. As subregion 103 is considerably larger than subregion 102, the overall figures for the region with respect to the proportion of farms reporting cotton do not reflect the intense specialization which characterizes the cotton-growing part. But it is noteworthy that, althongh only 25 percent of all commercial farms of the region report cotton, 59 percent of Class I farms report the crop and more than 86 percent of these are cotton farms. In fact, except for Class VI, from 69 to 86 percent of the farms reporting cotton in each class are cotton farms (see table 7).

The general situation, with respect to the proportion of all commercial farms that report cotton, in Region X, (which includes most of the United States total of cotton production under irrigation in an arid climate) is much the same as that just outlined for Region IX. In large parts of Region X no cotton is grown. Most of the farms in the region that do not grow cotton are in the large Central Valley of California which comprises the agriculturally variegated subregion 116. But subregion 116 is one of the principal cotton subregions of the country, and Region X, as a whole, produced about 2.7 million bales of cotton in 1954.

It may be noted (table 6) that about 29 percent of all commercial farms in Region X reported cotton, and that 48 and 32 percent, respectively, of Class I and Class II farms reported the crop. It is also noteworthy that three-fourths or more of all farms reporting cotton in each economic class are cotton farms (table 7).

DISTRIBUTION OF FARMS, ACREAGE, AND PRODUCTION BY ECONOMIC CLASS FOR ALL COMMERCIAL FARMS

In the preceding section we looked at the proportions of all commercial farms reporting cotton, by economic class, and at some of the possible implications. In this section we look at the facts, and their implications, which relate to the distribution of cotton-growing farms, cotton acreage, and cotton production among the several economic classes of commercial farms.

Since economic classes of farms represent farms grouped according to specified values of production for sale, we may, within certain limits, draw from data presented by economic class some inferences regarding the levels of income from farming of families who operate farms of various economic classes. More detailed data concerning income for cotton farms by economic class are found in the last two sections of this report.

In general, the American agriculture sector has participated in and contributed to economic growth of the country by producing increasing quantities of food and fiber while employing, directly, a steadily decreasing number of people. There has been a steady secular decline in the farm population of the United States since 1916. These transfers of labor resources from the farms to the nonfarm sectors of the economy have taken place mainly because farm people have moved to nonfarm employment which they judged to be more attractive than the alternatives available to them in agriculture.

Gross indications of income levels such as those afforded by economic classes of farms are to be used with some caution, but it does appear that from these economic-class data regarding farms growing cotton some useful inferences can be drawn. They concern: (*1*) The regions and classes of farms where changes in size and organization of farms growing cotton would seem most likely, and (*2*) the effect that such changes might have upon cotton production in the country at large and within the several regions.

In this connection it would seem reasonable to regard the farms in Classes V and VI as a group likely to change. Part of these represent farms where the operators are in the older age groups and upon retirement of present operator may be combined to form large farms. Many of the younger operators on these classes of farms may seek to increase their income by farm enlargement or off-farm employment.

Many factors besides relative income influence the individual farmer's decisions. Information concerning some of these other influences will be found later in this report. In particular, the sections dealing with tenure, labor force, and investment characteristics of cotton farms by economic class of farm are relevant to this problem. In addition, the nature of government programs and acreage controls will have a strong bearing on acreage and production trends. But it is of some interest to consider the picture for each of the ten selected regions as it is indicated by (*1*) the number of farms growing cotton, (*2*) the acreage of cotton harvested, and (*3*) the bales of cotton produced by farms in Classes I through III and those in Classes V and VI.

The Humid Belt Regions (Regions I to VI)

Table 6 shows that throughout the humid belt (Regions I through VI) from about one-third to almost three-fifths of all farms reporting cotton are found in Classes V and VI. The proportions of cotton acreage and production that are found on these two economic classes varies more widely among these regions than does the percentage of farms reporting cotton. The range, in the instance of acreage, is from 12 percent in Region VI to more than 50 percent in Region II, while for percentage of production, the range is from 9 percent in Region VI to 51 percent in Region II.

The most striking concentrations of farms reporting cotton and of cotton acreage and production in Economic Classes V and VI are found in Regions II and III—the Piedmont and midsouthern hilly regions. Around 50 percent of the farms producing cotton and of cotton acreage and production are accounted for by these two smallest size-of-business groups of farms.

From an overall standpoint Regions I and V indicate abont equal degrees of concentration of cotton production on Class V and VI farms. In each region more than 40 percent of the farms are found in these classes, while around one-third of the cotton acreage, and about one-fourth of cotton production is on snch farms.

Region IV, the Mississippi Delta, presents a somewhat different picture. The proportion of farms reporting cotton that falls in Classes V and VI (49 percent) is exceeded only in Regions II and III. In Region IV the approximately 20 percent of cotton acreage and production that these farms account for, however, is smaller than for any other humid region except Region VI.

The Gulf Coast Prairie of Texas and Louisiana, Region VI, is more similar to the subhumid belt than to the other regions of the humid belt with respect to the distribution, among economic classes, of farms growing cotton, cotton acreage, and cotton production. About one-third of the farms that grow cotton in this region fall in Classes V and VI. These farms, however, account for only 12 and 9 percent, respectively, of regional acreage and production of cotton.

In Regions II and III farms in Economic Classes I to III account for only 5 and 6 percent, respectively, of farms reporting cotton. There is more variation between these two regions with respect to the proportions of cotton acreage and production that are found on these three largest size-of-business groups. The proportions are definitely minor, however, in both instances. In Region II these farms account for 13 and 15 percent, respectively, of cotton acreage and production. The comparable percentages for Region III are 23 and 24.

It will be recalled that Regions I and V showed rather similar distribntions for Classes V and VI farms. In the case of the three larger economic classes, however, there is more difference than similarity. In Region I, 15 percent of all farms reporting cotton fall in Classes I through III, while in Region V only 9 percent are so classified. But in Region V these farms account for 47 percent of cotton production as compared to 38 percent for Region I. The proportions of cotton acreage found on these larger farms are almost the same for the two regions, 35 percent in Region I, and 34 percent in Region V. The nature of these distribntions suggests that farms in these classes are larger in Region V than in Region I, and that in Region V cotton yields on these classes are larger, relative to yields on farms in other economic classes, than is the case in Region I.

In Region IV, farms in Classes V and VI accounted for almost 50 percent of all farms growing cotton, but for only about 20 percent of the acreage and production. The relevant distributions for Economic Classes I through III for this region are almost the reverse of this. These larger classes account for only 20 percent of the farms reporting cotton, but for 55 and 59 percent, respectively, of the cotton acreage and production of the region.

Region VI has a smaller proportion of its cotton-growing farms, cotton acreage, and cotton production in Economic Classes V and VI than any other humid region. It is not surprising that the proportions of each of these items accounted for by Economic Classes I, II, and III is larger here than in any other humid region. About one-third of all farms reporting cotton, and roughly two-thirds of the region's acreage and production of cotton are found in Economic Classes I through III.

The Subhumid Belt Regions (Regions VII and VIII)

The two regions that represent cotton production under subhumid conditions display distinctly less concentration of farms, acreage, and production in Classes V and VI than in the regions of the humid belt. On the other hand, significantly larger proportions of acreage, of production, and of farms growing cotton are found in Economic Classes I, II, and III.

Regions VII and VIII, the two in the subhumid climatic belt, do not have much in common in regard to cotton production. The differentiation is due mostly to the extensive irrigation of cotton in Region VIII and the virtual absence of irrigation in Region VII. As there is frequently a shortage of rainfall, at least at the right time for crop production, in both regions, Region VIII, with its irrigation, has average yields of cotton more than twice as large as those in Region VII. In Region VII, about one-third of the farms reporting cotton and 14 and 9 percent, respectively, of cotton acreage and production are accounted for by farms in Classes V and VI. The comparable figures for Region VIII are 17 percent, 3 percent, and 2 percent.

Region VIII has a considerable concentration of farms growing cotton, and of cotton acreage and production in Economic Classes I, II, and III farms. Sixty percent of the farms reporting cotton and more than 90 percent of both cotton acreage and production are accounted for by farms in these classes.

About one-third of all farms reporting cotton in Region VII are found in Classes I, II, and III. These larger size-of-business classes, however, account for 60 percent of the region's cotton acreage, and more than 70 percent of regional cotton production. It is thus evident that, although Region VII has a much larger proportion of low-total-output commercial farms growing cotton than does Region VIII, cotton production in both regions is largely concentrated on the three largest size-of-business farm groups.

The Semiarid and Arid Cotton Production Regions (Regions IX and X)

In Regions IX and X the number of farms reporting cotton, cotton acreage, and cotton production which are accounted for by Classes V and VI farms are negligible. Farms in Classes I, II, and III account for four-fifths or more of all farms reporting cotton. For the arid belt region (Region X) these three classes harvest 98 percent of both cotton acreage and production. The semiarid Region IX almost matches these figures with 93 and 97 percent, respectively, of cotton acreage and production found on Class I, II, and III farms.

COTTON PRODUCTION ON NONCOMMERCIAL FARMS

In the 10 selected cotton-producing regions, noncommercial farms account for about 16 percent of the farms reporting cotton, but for only 4 percent of the acreage, and about 2 percent of cotton production. These farms comprise 35 percent of all Census farms in the 10 regions. It becomes evident, therefore, that relatively small proportions of noncommercial farms grow cotton, and that when they do the acreages are small, and yields are generally less than average for the region.

There is considerable variation among regions with respect to the proportion of all farms accounted for by noncommercial farms, and with respect to the percent of noncommercial farms that grow cotton. In the 6 regions that comprise the humid belt, only in Region III do as many as a third (34 percent) of the farms grow cotton. In Regions V and VI only 16 percent and 8 percent, respectively, of noncommercial farms report cotton. In the remaining three regions of the humid belt about a fourth of noncommercial farms grow cotton.

In none of the 4 regions outside the humid belt do as many as 10 percent of noncommercial farms grow the crop.

Only in the Piedmont, Region II, do noncommercial farms account for as much as 10 percent of regional cotton production; here they account for 14 percent. Excluding the Delta, where they account for only 1 percent of production, noncommercial farms account for from 4 to 8 percent of production in the other regions of the humid belt.

In each region outside the humid belt, noncommercial farms account for 1 percent or less of total cotton production.

COTTON PRODUCTION ON COTTON FARMS AND ON COMMERCIAL FARMS OTHER THAN COTTON FARMS

In preceding sections we have examined the distribution in each of our regions of farms growing cotton, of cotton acreage, and of cotton production among economic classes for all commercial farms, and for noncommercial farms. In this section the examination relates to similar distributions for cotton farms (those commercial farms for which sales of cotton and cottonseed account for 50 percent or more of total farm sales) and for all commercial farms other than cotton farms. These latter are the residuals after subtracting for each item the relevant numbers for each economic class of cotton farm from all commercial farms shown in table 6. The distributions are shown for cotton farms in table 8, and for commercial farms other than cotton farms in table 9.

In addition to contributing to our basic general information about the size of business structure of farms that produce cotton, the data in these 2 tables highlight the facts concerning the distribution, for the 10 regions, of farms growing cotton, and of cotton acreage and production on the 3 largest and the 2 smallest size-of-business groups for commercial farms.

In general, in the regions of the humid belt (Regions I through VI) there is a higher concentration of farms, and of acres and production of cotton in Classes V and VI on cotton farms than on other commercial farms that grow cotton.

In Regions VII through X the economic class structure of the number of farms growing and of the acreage and production of cotton is dominated by Classes I, II, and III. In these regions cotton farms show either approximately the same distribution by economic class as other commercial farms that grow cotton, or indicate relatively higher concentration in Classes I, II, and III.

TABLE 8.—PERCENT DISTRIBUTION OF NUMBER OF FARMS AND ACRES AND BALES OF COTTON HARVESTED, FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and item	All classes	Economic class of farm					
		I	II	III	IV	V	VI
REGION I	*Number*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Number of farms	57,374	0.5	2.1	7.7	25.9	36.3	27.5
Acres of cotton harvested	946,387	6.8	9.6	15.3	30.3	26.7	11.3
Bales of cotton harvested	595,510	7.4	10.4	17.1	32.0	24.3	8.8
REGION II							
Number of farms	40,263	0.1	0.4	1.9	11.9	39.8	45.9
Acres of cotton harvested	499,709	1.0	3.0	5.9	21.4	42.4	26.3
Bales of cotton harvested	287,513	1.2	3.4	6.7	23.4	42.7	22.6
REGION III							
Number of farms	171,185	0.3	1.0	4.0	19.1	40.8	34.8
Acres of cotton harvested	2,144,015	4.6	5.5	10.2	27.4	35.2	17.1
Bales of cotton harvested	1,571,294	5.9	6.0	11.7	29.8	33.8	12.8
REGION IV							
Number of farms	128,046	2.3	4.6	11.8	28.0	39.8	13.5
Acres of cotton harvested	2,997,248	23.5	13.8	17.0	22.5	19.2	4.0
Bales of cotton harvested	2,594,642	26.7	14.3	17.5	22.1	16.8	2.6
REGION V							
Number of farms	22,257	1.0	2.5	6.8	16.5	32.3	40.9
Acres of cotton harvested	575,424	12.2	10.1	15.0	21.9	25.3	15.5
Bales of cotton harvested	262,820	20.6	12.3	16.5	20.5	20.5	9.6
REGION VI							
Number of farms	7,995	2.1	9.7	22.2	30.0	22.7	13.3
Acres of cotton harvested	257,924	13.4	25.3	28.6	20.5	9.2	3.0
Bales of cotton harvested	186,638	14.5	26.3	29.2	20.2	7.8	2.0
REGION VII							
Number of farms	44,947	2.6	9.9	21.1	30.7	25.3	10.4
Acres of cotton harvested	3,206,187	11.1	21.3	27.9	24.5	12.4	2.8
Bales of cotton harvested	1,056,045	22.2	24.3	24.8	18.9	8.3	1.5
REGION VIII							
Number of farms	5,299	17.2	24.6	21.6	17.2	14.3	5.1
Acres of cotton harvested	422,103	55.5	24.9	12.0	4.7	2.3	0.6
Bales of cotton harvested	377,546	58.9	25.0	10.3	3.8	1.7	0.3
REGION IX							
Number of farms	14,650	28.6	39.6	16.0	9.8	5.3	0.7
Acres of cotton harvested	2,105,890	47.9	35.2	10.8	4.3	1.7	0.1
Bales of cotton harvested	1,305,958	60.4	31.4	5.9	1.8	0.5	(Z)
REGION X							
Number of farms	11,858	37.9	25.9	17.2	11.7	5.7	1.6
Acres of cotton harvested	1,282,203	83.7	10.7	3.6	1.5	0.4	0.1
Bales of cotton harvested	2,223,185	86.6	9.2	2.8	1.1	0.3	(Z)
TOTAL, 10 REGIONS							
Number of farms	503,874	3.0	5.0	9.0	22.1	35.8	25.1
Acres of cotton harvested	14,437,000	25.3	16.8	15.8	19.0	16.7	6.4
Bales of cotton harvested	10,461,151	29.1	15.1	12.4	15.8	13.5	4.1

Z 0.05 percent or less.

TABLE 9.—PERCENT DISTRIBUTION OF NUMBER OF FARMS REPORTING COTTON AND ACRES AND BALES OF COTTON HARVESTED, FOR COMMERCIAL FARMS OTHER THAN COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Number of farms	100.0	1.1	4.4	18.0	41.9	28.4	6.2
Acres of cotton harvested	100.0	8.0	12.4	24.2	35.5	17.2	2.7
Bales of cotton harvested	100.0	8.4	13.2	26.2	35.8	14.7	1.7
REGION II							
Number of farms	100.0	2.7	9.9	18.1	24.6	31.7	13.0
Acres of cotton harvested	100.0	11.0	20.2	21.4	22.1	20.1	5.2
Bales of cotton harvested	100.0	12.3	20.5	22.3	22.3	18.6	4.0
REGION III							
Number of farms	100.0	2.3	8.3	14.5	24.7	33.6	16.6
Acres of cotton harvested	100.0	13.0	18.6	18.8	23.4	20.1	6.1
Bales of cotton harvested	100.0	14.9	20.0	20.5	23.1	17.5	4.0
REGION IV							
Number of farms	100.0	11.4	17.8	21.5	26.1	18.8	4.6
Acres of cotton harvested	100.0	43.5	23.2	15.5	11.7	5.0	1.1
Bales of cotton harvested	100.0	47.5	23.2	14.5	10.7	3.6	0.5
REGION V							
Number of farms	100.0	1.7	6.2	13.4	19.1	32.9	26.7
Acres of cotton harvested	100.0	11.1	16.4	17.7	21.4	22.5	10.9
Bales of cotton harvested	100.0	18.4	19.1	18.4	19.1	17.8	7.2
REGION VI							
Number of farms	100.0	7.3	8.3	17.7	31.7	25.1	9.9
Acres of cotton harvested	100.0	38.5	15.7	14.0	18.9	10.1	2.8
Bales of cotton harvested	100.0	43.5	16.0	15.7	16.2	7.2	1.4
REGION VII							
Number of farms	100.0	3.0	13.9	22.6	30.0	23.3	7.2
Acres of cotton harvested	100.0	11.3	27.1	26.0	23.1	10.3	2.2
Bales of cotton harvested	100.0	19.4	29.3	23.9	19.0	7.1	1.3
REGION VIII							
Number of farms	100.0	25.4	30.6	22.5	11.4	7.8	2.2
Acres of cotton harvested	100.0	58.4	23.1	11.1	4.0	3.2	0.2
Bales of cotton harvested	100.0	70.6	19.8	6.2	2.5	0.7	0.2
REGION IX							
Number of farms	100.0	21.4	29.6	18.1	20.2	8.5	2.2
Acres of cotton harvested	100.0	43.3	32.1	11.6	9.5	2.7	0.8
Bales of cotton harvested	100.0	61.2	27.5	6.3	3.8	0.8	0.4
REGION X							
Number of farms	100.0	43.2	29.4	17.2	7.8	2.2	0.3
Acres of cotton harvested	100.0	85.7	9.5	3.4	0.9	0.4	0.1
Bales of cotton harvested	100.0	88.8	8.0	2.4	0.5	0.3	(Z)
TOTAL, 10 REGIONS							
Number of farms	100.0	3.9	9.0	18.1	32.4	27.1	9.5
Acres of cotton harvested	100.0	22.6	20.7	20.4	21.8	11.7	2.8
Bales of cotton harvested	100.0	41.1	17.1	15.8	16.6	8.0	1.4

Z 0.05 percent or less.

SOME IMPLICATIONS OF DISTRIBUTION OF COTTON PRODUCTION BY ECONOMIC CLASS AND REGION

In the United States, secular trends are toward increasing size of farm business and transfer of labor resources from the farm to nonfarm sectors of the economy. In recent years considerable emphasis has been placed on solving the low-income problem, involving the acceleration of the process of reduction in numbers of low-income farms through farm enlargement and development and the increase in nonfarm employment. In this context it is interesting to review the possible implications for cotton acreage and production of the reduction in numbers of Classes V and VI farms, and of increases in size of farms. This review covers the various areas or regions, and is based on current variations in farm organizations by economic class of farm. The following appear to be some of the more important implications of a further reduction in Classes V and VI farms and of increases in size of commercial farms in the 10 cotton regions.

In Region I (Eastern Coastal Plains), 43 percent of all commercial farms that grow cotton and about 30 percent and 26 percent, respectively, of the acreage and production of cotton are found in Classes V and VI. There is some indication that of the larger sizes of farms, fewer grow cotton, and that, of those that continue to grow it, fewer are cotton farms. The indication of these latter tendencies is not, however, nearly so conclusive in this as in some other regions.

In light of this, a continuation of the trends toward increasing size of farm, and a continued reduction in the number of Classes V and VI farms might result in continued, though probably not a large, reduction in aggregate cotton acreage in the region. The extent to which cotton acreage might be affected by a reduction in the numbers of Classes V and VI farms would seem to depend to some degree upon the extent to which such farms were used as part-time units, or combined into larger units. The smaller proportion of noncommercial farms having cotton would suggest a tendency toward reduction of aggregate cotton acreage on farms which become part-time units.

In Regions II, III, and V (Southern Piedmont, Eastern and Western Hilly Regions) where Classes V and VI cotton farms are numerous and the cotton enterprise is relatively less important on larger farms, further changes in farm size, and a reduction in low-income farms would appear likely to encourage more emphasis on other enterprises and to reduce acreages of cotton. The essential facts upon which these tentative inferences rest are: (*1*) In each of these regions the proportion of commercial farms that grow cotton is substantially lower for Classes I through III than for Classes V and VI. (*2*) In each of these regions there is considerably more concentration of farms and acreage and production of cotton in Classes V and VI for cotton farms than for other commercial farms that report cotton. (*3*) In these regions, Classes V and VI farms comprise around 50 percent of all farms growing cotton and they account for approximately 35 to 50 percent of cotton acreage, and 27 to 50 percent of cotton production. The concentration in these smallest size-of-business groups is much larger for cotton farms than for other commercial farms. In these regions, cotton farms account for from 84 to 97 percent of the acreage and production of cotton on Classes V and VI farms.

As an aid to the reader's perspective, it may be pointed out that, in 1954, these three regions accounted for 42 percent of all farms reporting cotton in the United States, and for 21 and 20 percent, respectively, of the national total of cotton acreage and production.

In Regions IV and VI (Delta and Gulf Coastal Regions) the implications of the data, by economic classes for farms reporting cotton and the acreage and production of cotton, are considerably different. In general, there would seem to be little indication that a reduction in numbers of Classes V and VI farms would significantly affect cotton acreage in these regions. In each of these regions substantial proportions of all farms reporting cotton fall into Classes V and VI (49 percent for Region IV and 32 percent for Region VI). In this respect there is similarity to Regions II, III, and V. Another similarity between these regions and Regions II, III, and V, is that smaller percentages of farms in Classes I and II report cotton than is the case for the smaller size-of-business classes. But this condition is less pronounced and is believed to result mainly from the presence in each of specialized rice farms. Particularly in Region VI, and to a marked but lesser degree in Region IV, rice farms do not grow cotton. In both regions rice farms tend to be concentrated in the larger size-of-business groups.

Other significant facts about Regions IV and VI that differentiate them from other regions of the humid belt are (*1*) in both regions significant proportions (one-fifth for Region IV and about one-third for Region VI) of farms reporting cotton fall in Classes I, II, and III, and (*2*) in Region IV, 55 and 59 percent, respectively, of regional acreage and production of cotton are found on the three largest size-of-business groups. The comparable percentages for Region VI are 64 and 66 percent.

The general terrain characteristics of these regions would make feasible the use of modern mechanical equipment adapted to larger cotton farms. A continued increase in the size of farms, given the generally higher yields which characterize larger farms, may well result in an increase for these regions in their proportion of the national total acreage and production of cotton.

In 1954, Regions IV and VI accounted for about 19 and 23 percent, respectively, of all acreage and production of cotton in the United States, and for 18 percent of all farms that grew cotton.

In Region VII (Black Prairie and Plains Regions), it will be recalled, about 31 percent of all farms reporting cotton are in Classes V and VI. These small size-of-business groups have, however, only 14 and 9 percent, respectively, of the region's total acreage and production of cotton. About one-third of all farms that grow cotton and three-fifths of the region's acreage of cotton are in the three large size-of-business groups, Classes I through III. These three groups of farms account for more than 70 percent of the cotton produced in the region. About as large a proportion of all farms in Classes I through III report cotton as of those in smaller size-of-business groups. To these considerations may be added the fact that about four-fifths of all commercial farms in Classes I through III that report cotton are cotton farms (which is about the same percentage as for other classes). Part-time and residential farms are not as important in the subhumid region. In view of these considerations, there does not seem to be any reason to expect a tendency for cotton acreage to be materially reduced in the region as a result of increases in size of farms.

Region VII, in 1954, contained about 9 percent of all farms in the United States that reported cotton, and accounted for 22 and 10 percent, respectively, of the United States total acreage and production of the crop.

In the three remaining regions, VIII, IX, and X, the production of cotton is now heavily concentrated in the three largest size-of-business groups. Effects on cotton acreage or production of reduced numbers of Class V and Class VI farms would appear to be virtually negligible. The general tendency toward increasing size might work in the direction of increasing emphasis on the cotton enterprise.

But it should be pointed out that these represent implications of how reduction in low-income farms and increased farm size might tend to influence farm organization and are based on the current size structure in these regions. They are not predictions of trends since many other factors, including governmental programs, technological developments, and changes in alternatives for use of resources, will affect actual trends.

Section 2.—TRENDS IN COTTON PRODUCTION BY REGIONS

Historical data concerning the geographic location and the acreage, yield, and output of cotton, can give valuable insights on the role cotton plays in the several regions. The picture drawn by data on trends of the acreage, yield, and production of cotton for each region shows, in the aggregate, the results of the responses of thousands of actual and potential growers of cotton to the whole continuously changing range of economic forces and institutional arrangements that affect the production of cotton. Figure 5 indicates the aggregate changes in acreage and production of cotton in the United States during the 75-year period 1879–1954.

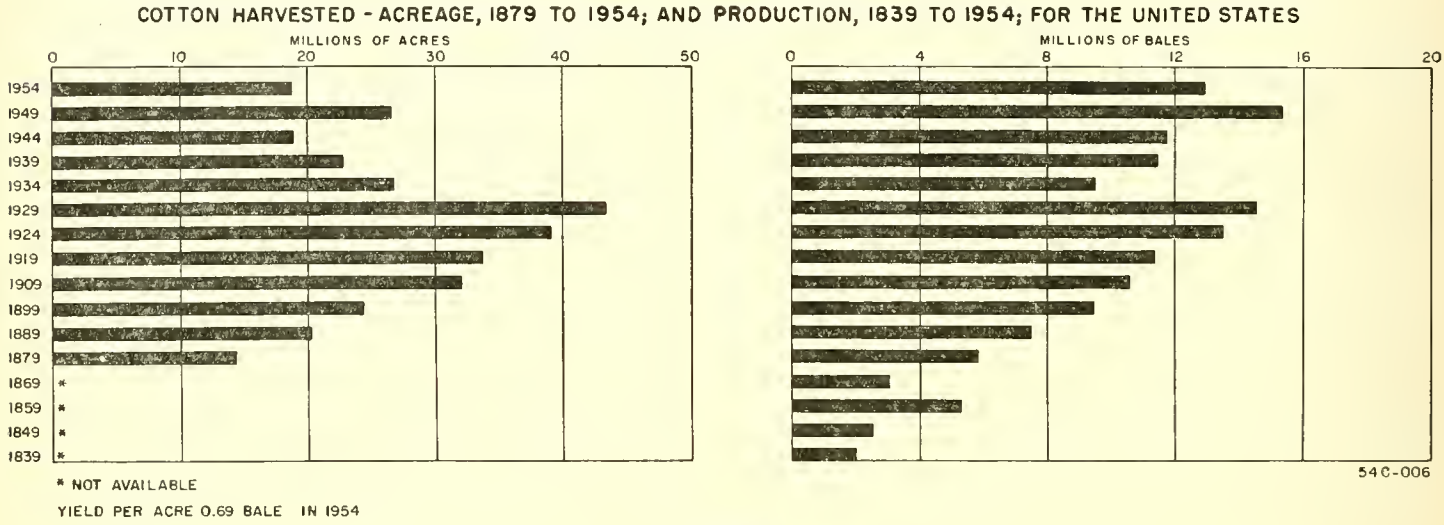

FIGURE 5.

Great changes have taken place during the past quarter-century in the overall picture of cotton production. In the 5-year period, 1928–32, an average of almost 41.5 million acres of cotton was in cultivation annually in the United States, whereas for the 5 years, 1950–54, the average acreage in cultivation was only 19.8 million acres—56 percent of the average acreage 22 years before. But the production of cotton in the period 1950–54 averaged 96 percent of that for the period 1928–32.

Behind these averages for two widely separated 5-year periods there is an interesting story of national and interregional adjustments to changing conditions of production and demand for cotton and for the resources used in its production.

The gist of this story is presented in the data of table 10.

The period 1928–32 represents the last 5 years of cotton production in this country prior to initiation of governmental price-support and acreage-control programs. The change in the acreage and production of cotton since 1928–32 is the result of widely varying regional adaptations to the changing conditions of production and demand.

For example, in 1954, the United States as a whole had in cultivation, on July 1, only 48 percent of the average cotton acreage for that date during the 1928–32 period. Three of the ten regions with which we are dealing (VIII, IX, and X) had far greater acreages of cotton in cultivation in 1954 than during the 1928–32 period. One additional region, the Mississippi Delta (Region IV), produced 28 percent more cotton from 29 percent fewer acres than in 1928–32. Production during 1954 in Regions VIII, IX, and X was, respectively, 590, 347, and 937 percent of their average for 1928–32. These four regions, in 1954, accounted for 39 and 54 percent, respectively, of the United States total of cotton acreage and production. Comparable percentages for 1928–32 are 17 and 21 percent.

In two of the regions (II and V) there has been a steady decline in cotton acreage and production since 1928–32. In Region II, cotton acreage in 1954 was only 24 percent of the regional average for 1928–32, while in Region V only 17 percent as much acreage was in cultivation as the average for the earlier period. The comparable figures for production in 1954 are 29 percent for Region II and 24 percent for Region V.

In the remaining regions (I, III, VI, and VII), the 1954 acreage as a percentage of each region's 1928–32 average acreage varies from 41 to 46 percent. The 1954 production, as a percentage of the 1928–32 average, ranges from 44 to 79 percent. In Regions I, III, and VI the range is only from 76 to 79 percent. It is thus evident that the fourth of these regions, Region VII, merits special attention in these comparisons, especially in regard to yields. For example, 1954 yields for Regions I, III, and VI, as percentages of their own 1928–32 averages, are, respectively, 169, 179, and 154. The comparable figure for Region VII is 108. The probable reasons for this virtually unchanged yield level since 1928 is that water limits the production in much of this region, and water is not available in sufficient quantity to permit the effective use of the commercial fertilizers that have played a major part in increasing the yields in other nonirrigated regions.

TABLE 10.—COTTON ACREAGE, YIELD PER ACRE, AND PRODUCTION FOR SPECIFIED 5-YEAR PERIODS, FOR THE UNITED STATES AND REGIONS: 1928 TO 1954 [1]

Item	Region										Total, 10 regions	United States
	I	II	III	IV	V	VI	VII	VIII	IX	X		
Average 1928–32:												
Acres.....thousands	3,665.6	3,029.3	5,569.7	4,825.6	4,828.3	727.5	10,903.6	214.0	1,716.4	387.0	35,867.0	41,423.0
Percent of U. S. total.....percent	8.8	7.3	13.4	11.6	11.7	1.8	26.3	0.5	4.1	0.9	86.6	100.0
Lint yield [1].....pounds	180	216	188	225	140	196	139	153	131	325	172	170
Percent of U. S. average.....percent	106	127	111	132	82	115	82	90	77	191	101	100
Production.....1,000 bales	1,374.9	1,361.9	2,175.9	2,263.7	1,411.3	305.1	3,166.8	68.9	468.6	261.7	12,858.8	14,667.0
Percent of U. S. total.....percent	9.4	9.3	14.8	15.4	9.6	2.1	21.6	0.5	3.2	1.8	87.7	100.0
Average 1933–37:												
Acres.....thousands	2,983.2	2,384.1	4,173.2	4,627.8	3,410.5	648.6	8,070.9	179.4	1,621.9	680.3	28,179.9	32,178.0
Percent of U. S. total.....percent	9.3	7.4	13.0	12.5	10.6	2.0	25.1	0.6	5.0	2.1	87.6	100.0
Percent of 1928–32 average.....percent	81	79	75	83	71	89	74	84	94	176	79	78
Lint yield.....pounds	230	233	232	280	141	168	142	193	144	492	196	192
Percent of U. S. average.....percent	120	121	121	146	73	87	74	101	75	256	102	100
Percent of 1928–32 average.....percent	128	108	123	124	101	86	102	126	110	151	114	113
Production.....1,000 bales	1,428.6	1,159.0	2,018.9	2,349.3	1,000.7	228.1	2,392.3	74.3	487.3	697.6	11,836.1	12,933.0
Percent of U. S. total.....percent	11.0	9.0	15.6	18.2	7.7	1.8	18.5	0.6	3.8	5.4	91.5	100.0
Percent of 1928–32 average.....percent	104	85	93	104	71	75	76	108	104	267	92	88
Average 1938–42:												
Acres.....thousands	2,248.6	1,746.5	3,431.5	3,334.5	2,303.6	424.0	5,442.9	197.9	1,414.5	703.0	21,247.0	24,201.0
Percent of U. S. total.....percent	9.3	7.2	14.2	13.8	9.5	1.8	22.5	0.8	5.8	2.9	87.8	100.0
Percent of 1928–32 average.....percent	61	58	62	69	48	58	50	92	82	182	59	58
Lint yield.....pounds	219	267	263	388	179	200	162	212	172	522	206	237
Percent of U. S. average.....percent	92	113	111	164	76	84	68	89	73	220	87	100
Percent of 1928–32 average.....percent	122	124	140	172	128	102	117	139	131	161	120	139
Production.....1,000 bales	1,025.4	971.5	1,882.8	2,693.4	860.0	178.8	1,835.3	89.3	508.2	763.9	10,808.6	11,977.0
Percent of U. S. total.....percent	8.6	8.1	15.7	22.5	7.2	1.5	15.3	0.7	4.2	6.4	90.2	100.0
Percent of 1928–32 average.....percent	75	71	87	119	61	59	58	130	108	292	84	82
Average 1943–47:												
Acres.....thousands	1,609.8	1,377.3	3,054.2	3,272.6	1,159.3	349.3	4,805.1	254.0	1,231.6	828.8	17,942.0	19,821.0
Percent of U. S. total.....percent	8.1	6.9	15.4	16.5	5.8	1.8	24.2	1.3	6.2	4.2	90.5	100.0
Percent of 1928–32 average.....percent	44	45	55	68	24	48	44	119	72	214	50	48
Lint yield.....pounds	285	311	310	368	189	198	146	300	202	570	268	256
Percent of U. S. total.....percent	111	121	121	144	74	77	57	117	79	223	105	100
Percent of 1928–32 average.....percent	158	144	165	164	135	101	105	196	154	175	156	151
Production.....1,000 bales	955.2	892.4	1,971.6	2,506.9	456.0	141.0	1,464.4	160.7	519.5	984.9	10,052.6	10,634.0
Percent of U. S. total.....percent	9.0	8.4	18.5	23.6	4.3	1.3	13.8	1.5	4.9	9.3	94.6	100.0
Percent of 1928–32 average.....percent	69	66	91	111	32	46	46	234	111	376	78	72
Average 1948–52:												
Acres.....thousands	1,939.1	1,071.3	3,179.6	4,086.2	1,206.8	410.1	5,859.4	639.1	2,843.1	1,828.9	23,063.6	24,961.0
Percent of U. S. total.....percent	7.8	4.3	12.7	16.4	4.8	1.6	23.5	2.6	11.4	7.3	92.4	100.0
Percent of 1928–32 average.....percent	53	35	57	85	25	56	54	299	166	473	64	60
Lint yield.....pounds	274	270	310	366	191	289	154	321	261	588	285	274
Percent of U. S. average.....percent	100	99	113	134	70	105	56	117	95	215	104	100
Percent of 1928–32 average.....percent	152	125	165	163	136	147	111	210	199	191	166	161
Production.....1,000 bales	1,105.7	603.7	2,055.3	3,117.7	481.0	249.2	1,878.7	417.3	1,547.8	2,241.7	13,698.1	14,259.0
Percent of U. S. total.....percent	7.8	4.2	14.4	21.9	3.4	1.7	13.2	2.9	10.9	15.7	96.1	100.0
Percent of 1928–32 average.....percent	80	44	94	138	34	82	59	606	330	857	107	97
Average 1950–54:												
Acres.....thousands	2,013.5	891.4	2,912.3	3,845.6	974.5	416.7	5,544.2	640.6	2,796.3	1,954.7	21,989.8	23,248.0
Percent of U. S. total.....percent	8.7	3.8	12.5	16.5	4.2	1.8	23.8	2.8	12.0	8.4	94.6	100.0
Percent of 1928–32 average.....percent	55	29	52	80	20	57	51	299	163	505	61	56
Lint yield.....pounds	277	280	321	368	194	286	139	286	282	685	289	270
Percent of U. S. average.....percent	103	104	119	136	72	106	51	106	104	254	107	100
Percent of 1928–32 average.....percent	154	130	171	164	139	146	100	187	215	211	168	159
Production.....1,000 bales	1,162.9	519.9	1,945.5	2,947.0	393.5	255.8	1,601.9	381.5	1,644.0	2,790.2	13,642.2	14,061.0
Percent of U. S. total.....percent	8.3	3.7	13.8	21.0	2.8	1.8	11.4	2.7	11.7	19.8	97.0	100.0
Percent of 1928–32 average.....percent	85	38	89	130	28	84	51	554	351	1,066	106	96
1954:												
Acres.....thousands	1,658.7	741.3	2,469.5	3,414.9	833.7	332.1	4,493.8	474.0	2,446.9	1,398.1	18,263.0	19,791.0
Percent of U. S. total.....percent	8.4	3.7	12.5	17.3	4.2	1.7	22.7	2.4	12.4	7.1	92.3	100.0
Percent of 1928–32 average.....percent	45	24	44	71	17	46	41	221	143	361	51	48
Lint yield.....pounds	304	259	336	406	195	302	150	412	319	842	329	332
Percent of U. S. average.....percent	92	78	101	122	59	91	45	124	96	254	99	100
Percent of 1928–32 average.....percent	169	120	179	180	139	154	108	269	244	259	191	195
Production.....1,000 bales	1,049.1	400.2	1,728.5	2,886.8	339.4	232.9	1,406.1	407.0	1,627.8	2,453.3	12,531.1	13,679.0
Percent of U. S. total.....percent	7.7	2.9	12.6	21.1	2.5	1.7	10.3	3.0	11.9	17.9	91.6	100.0
Percent of 1928–32 average.....percent	76	29	79	128	24	76	44	591	347	937	97	93

[1] Source: Agricultural Marketing Service, U. S. Department of Agriculture. Acres represent acres in cultivation July 1 and yield represents yield per acre in cultivation July 1.

In spite of these low yields relative to all other regions, cotton continues as the major crop on most farms in Region VII, and the region has maintained a relatively stable proportion of the United States total acreage of cotton from 1928–32 to 1954.

While the data of table 10 gives actual average yields, and production of cotton along with percentages, for later 5-year periods, of relevant 1928–32 averages, and of the United States totals or averages, table 11 presents relative numbers that indicate for each region how that region's changes compare with changes for the United States as a whole in acreage, yield, and production of cotton, in comparison with its own past. For example, under the column headed "Region IV" and opposite the item "Acres of cotton in cultivation July 1—1950–54 average" is the number 143. This means that for Region IV the 1950–54 acreage of cotton, as a percentage of the average for the period 1928–32, is 143 percent of the United States 1950–54 acreage expressed as a percentage of the acreage for 1928–32.

In general, the important figures here are those relating to yield. It will generally be found that, if the relative numbers for a region are high, that region has maintained or increased its importance as a cotton-producing region.

TABLE 11.—RATIO OF CHANGE SINCE 1928–32 IN ACREAGE, YIELD, AND PRODUCTION OF COTTON IN EACH REGION TO CHANGE FOR THE UNITED STATES FOR SPECIFIED PERIODS: 1933 TO 1954

[United States Change=100]

Item and period	Region										Total, 10 regions	United States
	I	II	III	IV	V	VI	VII	VIII	IX	X		
Acres of cotton in cultivation, July 1:												
Average 1933–37	104	101	96	106	91	114	95	108	121	226	101	100
Average 1938–42	105	100	107	119	83	100	86	160	141	314	102	100
Average 1943–47	92	94	115	142	50	100	92	248	150	446	104	100
Average 1948–52	88	58	95	142	42	93	90	498	277	788	107	100
Average 1950–54	98	52	93	143	36	102	91	534	291	902	109	100
1954	94	50	92	148	35	96	85	460	298	752	106	100
Yield of lint per acre:												
Average 1933–37	113	96	109	110	89	76	90	111	97	134	101	100
Average 1938–42	88	89	101	124	92	73	84	100	94	116	86	100
Average 1943–47	105	95	109	109	89	67	70	130	102	116	103	100
Average 1948–52	94	78	102	101	84	91	69	130	124	119	103	100
Average 1950–54	97	82	108	103	87	92	63	118	135	133	106	100
1954	87	62	92	92	71	79	55	138	125	133	98	100
Bales of cotton produced:												
Average 1933–37	118	97	106	118	81	85	86	122	118	303	105	100
Average 1938–42	91	87	106	145	74	72	71	159	132	356	102	100
Average 1943–47	96	92	126	154	44	64	64	325	154	522	108	100
Average 1948–52	82	45	97	142	35	85	61	625	340	883	110	100
Average 1950–54	89	40	93	135	29	87	53	577	366	1,110	110	100
1954	82	31	85	138	26	82	47	635	373	1,007	104	100

Section 3.—TENURE OF COTTON FARMS

Detailed analysis of the type of tenure, by which operators of cotton farms control the land resources they use, and of the economic implications of such tenure arrangements, is not an important purpose of this report. But the tenure characteristics of cotton farms have some effect on the interpretation of data relating to land use, to production expenses, and to investment on cotton farms, and the tenure of operator has some influence upon the mobility of labor and other resources employed on farms. Therefore, tenure arrangements of the operators of cotton farms will be briefly examined.

PROPORTION OF COTTON FARMS OPERATED BY CROPPERS

The legal status of croppers varies from State to State. Typically, the cropper is one who supplies only the labor input for the farming operation. The landlord typically provides the land and the power and equipment used, and makes most of the managerial decisions. Crops produced on cropper operations are usually divided equally between the cropper and the landlord. The cropper usually pays for half the fertilizer used.

Because of these facts the cropper is often treated, in economic analysis, as a farm laborer rather than as a farm operator; but a farm laborer who shares directly some of the short-term risks associated with the farm business.

In Census statistics, however, croppers are considered as farm operators. The principal objective here, in examining the proportions of cotton farms operated by croppers, is to bring out the facts concerning the influence of cropper operations on (*1*) land use, expenses, and investment for various economic classes of cotton farms, and (*2*) the probable mobility of labor and land resources on various size-of-business groups of cotton farms.

Given the facts concerning the typical cropper operation it would seem evident that: (*1*) The land associated with cropper operations would tend to be very largely cropland, (*2*) livestock enterprises would be at a minimum, and (*3*) to the extent that the landlord does not operate a farm, or if he does, to the extent that his farm falls in a different economic class from that of the cropper, production expenses and investment in machinery and equipment may be understated in those economic classes where croppers are found. Also, statistics for the economic class in which the landlords are found may overstate production expenses, and reflect investment in machinery and equipment that is not fully related to the operation with which it is statistically associated.

Because of investments in land and/or farm machinery and equipment by farm operators other than croppers, it would seem reasonable to infer that, with other considerations being equal, there would be a higher degree of mobility with respect to other employment opportunities among croppers than among other types of operators. The relatively rapid decline in numbers of croppers seems to strengthen such an inference. It follows, also, that the land resources used by croppers may be more readily available than those controlled by operators of other tenure statuses for use in future adjustments which entail increased land resources per farm.

With these facts in mind, it is interesting to examine the data in table 12 concerning the proportions of farms operated by croppers for the various economic classes of cotton farms in the 10 designated production regions.

TABLE 12.—PERCENT DISTRIBUTION OF ALL COMMERCIAL FARM OPERATORS, AND COTTON FARM OPERATORS IN EACH ECONOMIC CLASS OF FARM, BY COLOR AND TENURE OF OPERATOR, BY REGIONS: 1954

Region and item	Percent distribution							
	All commercial farms	Cotton farms by economic class of farm						
		All classes	I	II	III	IV	V	VI
REGION I								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	59.8	38.8	98.3	92.8	58.8	41.0	37.6	27.5
Nonwhite	40.2	61.2	1.7	7.2	41.2	59.0	62.4	72.5
Owners, part owners, and managers	51.7	38.3	88.9	76.3	44.7	30.3	34.6	45.0
White	77.6	57.6	98.0	97.5	81.9	70.7	58.9	34.5
Nonwhite	22.4	42.4	2.0	2.5	18.1	29.3	41.1	65.5
All tenants except croppers	26.2	32.3	9.8	17.5	30.4	34.0	31.6	33.7
White	46.5	31.2	100.0	79.2	49.5	34.6	30.3	22.2
Nonwhite	53.5	68.8	--	20.8	50.5	65.4	69.7	77.8
Croppers	22.0	29.4	1.4	6.2	24.9	35.7	33.8	21.3
White	33.8	22.7	100.0	73.7	28.8	21.9	22.6	21.2
Nonwhite	66.2	77.3	.....	26.3	71.2	78.1	77.4	78.8
REGION II								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	71.3	48.1	100.0	93.9	81.7	50.9	48.1	45.6
Nonwhite	28.7	51.9	.....	6.1	18.3	49.1	51.9	54.4
Owners, part owners, and managers	62.2	38.1	95.7	93.9	71.6	38.2	31.0	42.2
White	89.5	72.5	100.0	93.5	92.5	81.2	77.9	65.0
Nonwhite	10.5	27.5	.....	6.5	7.5	18.8	22.1	35.0
All tenants except croppers	17.1	25.7	4.3	6.1	9.6	23.3	26.3	26.7
White	54.6	44.4	100.0	100.0	76.4	50.3	49.9	37.8
Nonwhite	45.4	55.6	.....	.....	23.6	49.7	50.1	62.2
Croppers	20.6	36.2	.....	.....	18.7	38.5	42.7	31.1
White	30.0	25.2	.....	.....	42.9	21.1	25.2	26.0
Nonwhite	70.0	74.8	.....	.....	57.1	78.9	74.8	74.0

Region and item	Percent distribution							
	All commercial farms	Cotton farms by economic class of farm						
		All classes	I	II	III	IV	V	VI
REGION III								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	63.0	54.0	97.9	91.6	77.4	62.2	53.7	45.7
Nonwhite	37.0	46.0	2.1	8.4	22.6	37.8	46.3	54.3
Owners, part owners, and managers	52.6	42.2	81.7	66.5	46.0	38.9	38.0	47.4
White	80.4	71.5	97.4	91.5	89.4	81.2	75.4	60.3
Nonwhite	19.6	28.5	2.6	8.5	10.6	18.8	24.6	39.7
All tenants except croppers	26.0	30.9	16.8	25.8	32.7	29.5	30.7	31.9
White	49.8	46.5	100.0	95.4	81.7	60.5	47.4	32.9
Nonwhite	50.2	53.5	.....	4.6	18.3	39.5	52.6	67.1
Croppers	21.4	26.9	1.5	7.7	21.3	31.5	31.2	20.7
White	36.1	35.2	100.0	80.5	45.0	40.4	33.5	32.1
Nonwhite	63.9	64.8	.....	19.5	55.0	59.6	66.5	67.9
REGION IV								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	50.3	44.0	98.6	93.0	72.9	46.3	30.5	27.7
Nonwhite	49.7	56.0	1.4	7.0	27.1	53.7	69.5	72.3
Owners, part owners, and managers	31.4	25.3	68.1	45.7	29.3	23.8	18.9	29.4
White	89.0	72.9	98.8	93.3	86.0	73.5	65.1	54.0
Nonwhite	20.0	27.1	1.2	6.7	14.0	26.5	34.9	46.0
All tenants except croppers	25.7	26.4	29.3	47.6	43.6	27.4	20.9	17.4
White	61.1	58.0	98.5	94.3	81.1	55.4	39.7	34.4
Nonwhite	38.9	42.0	1.5	5.7	18.9	44.6	60.3	65.6
Croppers	42.9	48.3	2.6	6.7	27.1	48.7	60.1	53.2
White	22.1	21.3	93.5	81.3	45.5	27.8	16.5	11.0
Nonwhite	77.9	78.7	6.5	18.7	54.5	72.2	83.5	89.0

TABLE 12.—PERCENT DISTRIBUTION OF ALL COMMERCIAL FARM OPERATORS, AND COTTON FARM OPERATORS IN EACH ECONOMIC CLASS OF FARM, BY COLOR AND TENURE OF OPERATOR, BY REGIONS: 1954—Continued

Region and item	Percent distribution							
	All commercial farms	Cotton farms by economic class of farm						
		All classes	I	II	III	IV	V	VI
REGION V								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	80.0	57.0	100.0	96.2	84.7	70.8	57.7	42.9
Nonwhite	20.0	43.0	------	3.8	15.3	29.2	42.3	57.1
Owners, part owners, and managers	76.6	56.1	75.8	70.3	57.6	53.1	49.5	61.0
White	87.0	66.3	100.0	95.9	90.0	83.4	73.4	49.0
Nonwhite	13.0	33.7	------	4.1	10.0	16.6	26.6	51.0
All tenants except croppers	16.7	28.4	18.6	27.9	29.3	28.3	29.8	27.5
White	66.6	53.3	100.0	96.8	84.3	68.7	52.3	38.8
Nonwhite	33.4	46.7	------	3.2	15.7	31.3	47.7	61.2
Croppers	6.6	15.5	5.6	1.8	13.1	18.7	20.6	11.5
White	34.0	30.1	100.0	100.0	62.5	38.0	27.9	20.5
Nonwhite	66.0	69.9	------	------	37.5	62.0	72.1	79.5
REGION VI								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	89.7	79.3	97.0	97.4	91.8	81.4	72.7	48.8
Nonwhite	10.3	20.7	3.0	2.6	8.2	18.6	27.3	51.2
Owners, part owners, and managers	63.5	41.7	63.1	43.6	35.5	32.8	41.9	67.1
White	91.8	76.6	100.0	98.5	92.9	82.2	74.9	44.1
Nonwhite	8.2	23.4	------	1.5	7.1	17.8	25.1	53.9
All tenants except croppers	32.5	50.2	33.9	52.5	56.0	57.8	50.1	24.4
White	88.9	84.4	100.0	97.5	93.0	86.3	74.2	53.8
Nonwhite	11.1	15.6	------	2.5	7.0	13.7	25.8	46.2
Croppers	4.0	8.1	3.0	3.9	8.4	9.4	8.0	8.5
White	63.9	61.3	------	83.3	80.0	49.1	51.7	72.2
Nonwhite	36.1	38.7	100.0	16.7	20.0	50.9	48.3	27.8
REGION VII								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	96.9	94.4	99.8	99.7	99.2	96.7	92.2	76.6
Nonwhite	3.1	5.6	0.2	0.3	0.8	3.3	7.8	23.4
Owners, part owners, and managers	65.4	50.9	70.5	61.7	50.7	46.9	48.8	52.8
White	98.3	97.0	99.8	99.8	99.7	98.8	96.1	84.6
Nonwhite	1.7	3.0	0.2	0.2	0.3	1.2	3.9	15.4
All tenants except croppers	29.6	40.0	28.5	35.9	44.8	44.1	38.2	29.6
White	97.3	96.1	100.0	99.4	99.2	98.0	95.3	76.1
Nonwhite	2.7	3.9	------	0.6	0.8	2.0	4.7	23.9
Croppers	5.0	9.1	1.0	2.4	4.5	9.0	13.0	17.6
White	74.9	72.3	100.0	100.0	94.1	79.5	68.2	53.7
Nonwhite	25.1	27.7	------	------	5.9	20.5	31.8	46.3
REGION VIII								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	99.6	99.7	98.9	99.6	100.0	100.0	100.0	100.0
Nonwhite	0.4	0.3	1.1	0.4	------	------	------	------
Owners, part owners, and managers	81.9	80.8	85.1	80.9	83.3	78.0	75.5	79.6
White	99.8	99.9	99.4	100.0	100.0	100.0	100.0	100.0
Nonwhite	0.2	0.1	0.6	------	------	------	------	------
All tenants except croppers	17.5	18.4	14.9	18.7	16.3	20.9	21.8	20.4
White	98.6	99.0	96.3	98.0	100.0	100.0	100.0	100.0
Nonwhite	1.4	1.0	3.7	2.0	------	------	------	------
Croppers	0.6	0.8	------	0.4	0.4	1.1	2.6	------
White	100.0	100.0	------	100.0	100.0	100.0	100.0	------
Nonwhite	------	------	------	------	------	------	------	------
REGION IX								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	99.7	99.8	100.0	99.9	100.0	99.7	98.1	95.2
Nonwhite	0.3	0.2	(Z)	0.1	------	0.3	1.9	4.8
Owners, part owners, and managers	67.3	52.9	56.2	48.6	54.1	55.4	57.5	66.7
White	99.8	99.9	100.0	100.0	100.0	100.0	98.9	92.9
Nonwhite	0.2	0.1	------	------	------	------	1.1	7.1
All tenants except croppers	32.1	45.3	42.6	50.0	44.5	42.8	35.4	23.8
White	99.7	99.8	99.9	100.0	100.0	99.2	98.2	100.0
Nonwhite	0.3	0.2	0.1	------	------	0.8	1.8	------
Croppers	0.6	1.8	1.3	1.4	1.5	1.8	7.1	9.5
White	97.6	96.1	100.0	93.8	100.0	100.0	90.9	100.0
Nonwhite	2.4	3.9	------	6.2	------	------	9.1	------
REGION X								
All farm operators	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	96.4	98.0	99.4	98.2	97.8	96.0	92.6	94.7
Nonwhite	3.6	2.0	0.6	1.8	2.2	4.0	7.4	5.3
Owners, part owners, and managers	85.5	79.6	77.6	75.9	81.2	88.0	85.2	86.8
White	96.7	98.1	99.3	97.9	98.8	95.9	94.8	93.9
Nonwhite	3.3	1.9	0.7	2.1	1.2	4.1	5.2	6.1
All tenants except croppers	14.3	19.5	21.4	23.5	18.1	10.9	13.3	10.5
White	94.9	97.4	99.5	99.3	93.2	96.7	77.8	100.0
Nonwhite	5.1	2.6	0.5	0.7	6.8	3.3	22.2	------
Croppers	0.2	0.9	1.0	0.7	0.7	1.1	1.5	2.6
White	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nonwhite	------	------	------	------	------	------	------	------

Z 0.05 percent or less.

It will be observed that, from an overall standpoint, croppers are an important tenure type only in Regions I through V of the humid climatic belt. In the most westerly of these, Region V, croppers account for only 15 percent of all cotton farm operators. In the other four regions of this climatic belt they account for from 27 to 48 percent of all operators. The most significant fact brought out is the large percentages of all operators in the three smallest size-of-business groups that are croppers in Regions I through IV. It will be recalled that these regions contain a preponderance of all small size-of-business cotton farms.

Croppers are a relatively unimportant group in the five remaining regions. They do account for about 13 and 18 percent, respectively, of Class V and Class VI farms in Region VII; while in Region VI they account for from 8 to 9 percent of the two smallest size-of-business groups of farms.

TENANTS OTHER THAN CROPPERS

The proportions, *among various regions*, of the large farms that are operated by tenants other than croppers provide some indication of the extent to which land for moderate to large size farm businesses is available, and attractive to persons with limited capital.

Both relatively and absolutely small proportions of the operators of Class I and Class II farms in Regions I and II are found in this tenure category. In Region II a very small proportion of Class III farms are in this tenure group.

At the other extreme, a relatively high proportion of larger farm business groups are found in this tenure group in Regions IV and IX (the Mississippi Delta and the High Plains of Texas, respectively). In Region X (the irrigated West) the proportion of tenants other than croppers is low, but the proportions of Class I and II farms found in this tenure group are substantially above the percentage for all farms. In Region VI, a substantial 34 percent of Class I farms are found in this group, while the percentages of Classes II and III farms there are larger than those for all farms.

In Regions III, V, and VII the percentages of Classes I and II farms operated by tenants other than croppers are smaller than the proportion of all farms found in the tenure group. For Region VIII, there are less than proportional percentages of both Classes I and III farms in this tenure group.

Section 4.—THE LAND RESOURCE AND ITS UTILIZATION

Land accounts for the major part of total investment on all sizes of cotton farms and, for a given region, the quantity of land controlled by an operator of a cotton farm is, generally, positively associated with the level of return to him for his labor and management.

The present distribution of the land resource among the economic classes of cotton farms for the ten regions is therefore a useful statistic. Some summary information of this type is given in table 13.

TABLE 13.—ALL LAND IN FARMS, TOTAL CROPLAND, AND IRRIGATED LAND, BY ECONOMIC CLASS OF COTTON FARM, TOTAL OF TEN REGIONS: 1954

Item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
All land in farms.....million acres..	62.5	15.4	9.4	8.9	10.9	11.2	6.7
Percent distribution ... percent..	100.0	24.7	15.0	14.2	17.4	18.0	10.7
Total cropland.....million acres..	38.9	10.0	6.4	5.9	7.0	6.5	3.1
Percent distribution... percent..	100.0	25.7	16.5	15.1	18.0	16.6	8.1
Irrigated land.....million acres..	5.5	4.2	1.0	0.2	0.1	(Z)	(Z)
Percent distribution ... percent..	100.0	75.5	18.3	4.1	1.5	0.5	0.1

Z 0.05 million or less.

DISTRIBUTION OF LAND, BY MAJOR USES

In 1954, there were approximately 62.5 million acres of land in cotton farms in the 10 regions with which this report is concerned. In these 10 regions as a whole, a little more than half of this land (54 percent) was on farms in the three largest size-of-business groups (Classes I to III). Twenty-nine percent was in farms with gross sales of less than $2,500 and the remaining 17 percent was in farms having sales of $2,500 to $4,999.

Cropland is generally of considerable significance to cotton farms. The distribution of cropland by economic class of farm, for our 10 regions in the aggregate, is given in table 13. The percentage of cropland found on cotton farms in the first 3 economic classes is slightly larger than the proportion of all land; conversely, the 2 smallest size-of-business groups account for one-fourth of the cropland and 29 percent of all land.

Table 13 shows also the distribution of irrigated land among economic classes of farms. In our 10 regions there were 5.5 million acres of irrigated land. This is equivalent to about 14 percent of all cropland on cotton farms. About 98 percent of this irrigated land was on the three largest size-of-business groups of farms, and more than three-fourths of it was on farms in Economic Class I. Many farms have attained a volume of sales that placed them in the larger size-of-business groups because of the use of irrigation.

The distribution of land resources among economic classes for the total of our 10 regions, should be considered along with the distribution of farm numbers for the same aggregates. Table 8 shows that 61 percent of all cotton farms fall in Classes V and VI; 17 percent in Classes I, II, and III; and 22 percent in Class IV.

Data on land distribution for all 10 regions as a whole are useful but, averages for large nonhomogeneous areas may be somewhat misleading. There are some striking differences among the regions with respect to distribution of the land resources among economic classes of cotton farms. Table 14 gives data for individual regions on the distribution of land by major-use classes for each economic class of farm. First, let us examine the individual regions with respect to the distribution of cropland among economic classes.

The 4 regions where the highest proportions of cropland are on farms in Classes V and VI are Regions I, II, III, and V. In Region I, 39 percent of all the cropland is on Classes V and VI farms. Comparable percentages for other regions in this group are: Region II, 69 percent; Region III, 52 percent; and Region V, 44 percent.

In Region IV ("the Mississippi Delta"), Region VI (the Texas-Louisiana Gulf Coast Prairie), and Region VII (the Black Prairie and Rio Grande Plains of Texas and the Rolling Plains of Texas and Oklahoma) the proportions of total cropland on Classes V and VI farms are, respectively, 18, 14, and 15 percent.

The 3 remaining regions in which very small proportions of total cropland are found on the two smallest size-of-business groups of farms are Region VIII (the lower Rio Grande Valley), Region IX (the High Plains of Texas), and Region X (the arid irrigated areas of far western Texas, New Mexico, Arizona, and the San Joaquin Valley of California).

Regions with low percentages of cropland in Classes V and VI farms have relatively high proportions in Classes I, II, and III. Similarly those with high percentages on Classes V and VI farms have low percentages on the larger farms. In Regions I, II, III, and VI the percentage of total cropland on Classes I through III farms ranges from 12 to 37 percent, well below the 10-region average of 57 percent. Regions IV, VI, and VII have, respectively, 63, 65, and 61 percent of their cropland on farms in Classes I through III. In Regions VIII, IX, and X the proportions of cropland on the three larger groups of farms range from 92 to 98 percent.

An interesting aspect of the distribution of land by major-use categories among economic classes for the several regions is the variation by regions of the proportion that cropland is of total land in farms. In Regions II, III, and V cropland accounts for only about 50 percent of all land in farms for most economic classes. Generally, the proportion rises slightly from Class I to Class IV; tends to drop for Class V and shows a marked drop for Class VI. Region I exhibits a similar pattern, but the ratio of cropland to all land is somewhat higher. In all of these regions most of the noncropland is accounted for by woodland.

As would be expected, farms in "the Mississippi Delta," Region IV, have a higher ratio of cropland to total land in farms than farms in the 4 regions mentioned above. In Region IV, generally, cropland accounts for from 70 to 75 percent of all land in farms, but on Class VI farms the average is about 60 percent. Again, most noncropland here is woodland.

The general ratio of cropland to all land in Regions VI and VII is about 62 and 71 percent, respectively. In Region VI, however, cropland accounts for only a little more than 50 percent of total land in the 2 smallest size-of-business groups, and in Region VII cropland is less than 60 percent of all land for Class VI farms. In these areas noncropland is likely to be open pasture.

TABLE 14.—LAND USE FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Land in farms, acres	6,044,937	525,465	765,313	891,348	1,499,797	1,548,752	814,262
Percent distribution	100.0	8.7	12.7	14.7	24.8	25.6	13.5
Total cropland, acres	3,521,137	271,633	387,667	522,912	950,466	941,817	446,642
Percent of land in farms	58.2	51.7	50.7	58.7	63.4	60.8	54.8
Percent distribution	100.0	7.7	11.0	14.8	27.0	26.7	12.7
Cropland harvested, acres	2,949,769	216,050	310,801	446,148	828,672	797,071	351,027
Percent of total cropland	83.8	79.6	80.2	85.3	87.2	84.6	78.6
Percent distribution	100.0	7.3	10.5	15.1	28.1	27.0	11.9
Cropland for pasture, acres	259,618	32,315	47,776	33,140	62,418	58,442	25,527
Percent distribution	100.0	12.5	18.4	12.8	24.0	22.5	9.8
Percent of all cropland	7.4	11.9	12.3	6.3	6.6	6.2	5.7
Cropland not harvested and not pastured, acres	311,750	23,268	29,090	43,624	59,376	86,304	70,088
Percent distribution	100.0	7.5	9.3	14.0	19.0	27.7	22.5
Percent of all cropland	8.9	8.6	7.5	8.3	6.2	9.2	15.7
Open permanent pasture, acres	199,469	31,967	43,642	27,351	41,840	39,009	15,660
Percent distribution	100.0	16.0	21.9	13.7	21.0	19.6	7.8
Woodland pastured, acres	689,303	50,551	88,634	99,974	180,915	168,912	100,317
Percent distribution	100.0	7.3	12.9	14.5	26.2	24.5	14.6
Woodland not pastured, acres	1,506,784	163,596	230,792	226,399	295,172	364,490	226,335
Percent distribution	100.0	10.9	15.3	15.0	19.6	24.2	15.0
Other land, acres	128,244	7,718	14,578	14,712	31,404	34,524	25,308
Percent of farms reporting	71.5	92.7	87.0	78.3	69.3	69.7	72.6
Percent of all land in farms	2.1	1.5	1.9	1.6	2.1	2.2	3.1
Irrigated land in farms, acres	1,937	660	232	870	125	35	15
Percent distribution	100.0	34.1	12.0	44.9	6.4	1.8	0.8
Percent of farms reporting	0.3	9.8	1.5	1.3	0.3	0.1	(Z)
Percent of total cropland	0.1	0.2	0.1	0.2	(Z)	(Z)	(Z)
REGION II							
Land in farms, acres	3,217,057	49,690	130,103	222,242	542,177	1,200,662	1,072,183
Percent distribution	100.0	1.5	4.0	6.9	16.9	37.4	33.3
Total cropland, acres	1,609,357	22,078	58,903	112,628	306,166	625,368	484,214
Percent of land in farms	50.0	44.5	45.3	50.7	56.5	52.1	45.2
Percent distribution	100.0	1.4	3.7	7.0	19.0	38.9	30.0
Cropland harvested, acres	1,231,478	15,716	39,774	77,873	241,665	497,690	358,760
Percent of total cropland	76.5	71.0	67.6	69.2	78.9	79.6	74.1
Percent distribution	100.0	1.3	3.2	6.3	19.6	40.5	29.1
Cropland for pasture, acres	153,050	4,722	12,103	20,307	30,919	47,049	37,950
Percent distribution	100.0	3.1	7.9	13.3	20.2	30.7	24.8
Percent of all cropland	9.5	21.4	20.5	18.0	10.1	7.5	7.8
Cropland not harvested and not pastured, acres	224,829	1,640	7,026	14,448	33,582	80,629	87,504
Percent distribution	100.0	0.7	3.1	6.4	15.0	35.9	38.9
Percent of all cropland	14.0	7.4	11.9	12.8	11.0	12.9	18.1
Open permanent pasture, acres	233,169	2,320	15,585	24,772	37,982	81,549	70,961
Percent distribution	100.0	1.0	6.7	10.6	16.3	35.0	30.4
Woodland pastured, acres	452,799	10,837	23,013	28,738	68,165	161,251	160,795
Percent distribution	100.0	2.4	5.1	6.3	15.1	35.6	35.5
Woodland not pastured, acres	821,654	13,805	30,164	50,690	114,237	295,136	317,622
Percent distribution	100.0	1.7	3.7	6.2	13.9	35.9	38.6
Other land, acres	100,078	650	2,438	5,414	15,627	37,358	38,591
Percent of farms reporting	82.4	95.7	98.9	87.1	84.4	81.9	82.0
Percent of all land in farms	3.1	1.3	1.9	2.4	2.9	3.1	3.6
Irrigated land in farms, acres	230				70	160	
Percent distribution	100.0				30.4	69.6	
Percent of farms reporting	0.1				0.2	0.2	
Percent of total cropland	(Z)				(Z)	(Z)	
REGION III							
Land in farms, acres	13,870,811	744,657	930,129	1,358,694	3,114,584	4,561,951	3,160,796
Percent distribution	100.0	5.4	6.7	9.8	22.5	32.9	22.8
Total cropland, acres	6,922,192	375,092	463,713	720,033	1,747,812	2,285,530	1,330,012
Percent of land in farms	49.9	50.4	49.9	53.0	56.1	50.1	42.1
Percent distribution	100.0	5.4	6.7	10.4	25.2	33.0	19.2
Cropland harvested, acres	5,292,736	270,993	322,727	530,856	1,379,807	1,807,517	980,836
Percent of total cropland	76.5	72.2	69.6	73.7	78.9	79.1	73.7
Percent distribution	100.0	5.1	6.1	10.0	26.1	34.1	18.5
Cropland for pasture, acres	975,355	81,899	100,825	129,458	231,472	268,158	163,543
Percent distribution	100.0	8.4	10.3	13.3	23.7	27.5	16.8
Percent of all cropland	14.1	21.8	21.7	18.0	13.2	11.7	12.3
Cropland not harvested and not pastured, acres	654,101	22,200	40,161	59,719	136,533	209,855	185,633
Percent distribution	100.0	3.4	6.1	9.1	20.9	32.1	28.4
Percent of all cropland	9.4	5.9	8.7	8.3	7.8	9.2	14.0
Open permanent pasture, acres	1,529,066	95,579	134,588	150,589	321,445	494,642	332,223
Percent distribution	100.0	6.3	8.8	9.8	21.0	32.4	21.7
Woodland pastured, acres	2,437,868	111,666	155,036	211,437	440,446	821,846	697,437
Percent distribution	100.0	4.6	6.3	8.7	18.1	33.7	28.6
Woodland not pastured, acres	2,395,308	140,296	143,265	224,520	477,861	756,473	652,893
Percent distribution	100.0	5.8	6.0	9.4	20.0	31.6	27.2
Other land, acres	586,377	22,024	33,527	52,115	127,020	203,460	148,231
Percent of farms reporting	77.6	90.3	85.2	82.3	77.6	76.0	78.7
Percent of all land in farms	4.2	3.0	3.6	3.8	4.1	4.5	4.7
Irrigated land in farms, acres	13,576	9,283	917	1,191	1,035	1,000	150
Percent distribution	100.0	68.4	6.7	8.8	7.6	7.4	1.1
Percent of farms reporting	0.2	12.0	1.6	1.1	0.3	0.2	0.1
Percent of total cropland	0.2	2.5	0.2	0.2	0.1	(Z)	(Z)

Z 0.05 percent or less.

TABLE 14.—LAND USE FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION IV							
Land in farms, acres	9,652,737	2,973,423	1,563,157	1,541,368	1,731,674	1,406,916	436,199
Percent distribution	100.0	30.8	16.2	16.0	17.9	14.6	4.5
Total cropland, acres	6,984,120	2,088,189	1,155,546	1,163,541	1,291,585	1,028,309	256,950
Percent of land in farms	72.4	70.2	73.9	75.5	74.6	73.1	58.9
Percent distribution	100.0	29.9	16.5	16.7	18.5	14.7	3.7
Cropland harvested, acres	6,078,243	1,807,642	1,012,384	1,035,655	1,139,706	887,726	195,130
Percent of total cropland	87.0	86.6	87.6	89.0	88.2	86.3	75.9
Percent distribution	100.0	29.7	16.7	17.0	18.8	14.6	3.2
Cropland for pasture, acres	595,847	211,739	95,636	81,900	91,089	80,513	34,970
Percent distribution	100.0	35.5	16.0	13.8	15.3	13.5	5.9
Percent of all cropland	8.5	10.1	8.3	7.0	7.1	7.8	13.6
Cropland not harvested and not pastured, acres	310,030	68,808	47,526	45,986	60,790	60,070	26,850
Percent distribution	100.0	22.2	15.3	14.8	19.6	19.4	8.7
Percent of all cropland	4.4	3.3	4.1	4.0	4.7	5.8	10.4
Open permanent pasture, acres	403,098	137,714	54,973	50,465	69,342	60,574	30,030
Percent distribution	100.0	34.2	13.6	12.5	17.2	15.0	7.4
Woodland pastured, acres	822,450	234,940	117,228	128,780	144,222	129,482	67,798
Percent distribution	100.0	28.6	14.3	15.7	17.5	15.7	8.2
Woodland not pastured, acres	1,044,478	385,644	169,608	138,643	161,749	128,459	60,405
Percent distribution	100.0	36.9	16.2	13.3	15.5	12.3	5.8
Other land, acres	398,591	126,966	65,802	59,939	64,776	60,092	21,016
Percent of farms reporting	51.6	87.2	85.2	67.1	50.8	42.6	48.3
Percent of all land in farms	4.1	4.3	4.2	3.9	3.7	4.3	4.8
Irrigated land in farms, acres	189,326	115,347	29,897	20,625	15,777	6,850	830
Percent distribution	100.0	60.9	15.8	10.9	8.4	3.6	0.4
Percent of farms reporting	2.8	20.1	8.3	4.3	2.9	1.4	0.8
Percent of total cropland	2.7	5.5	2.6	1.8	1.2	0.7	0.3
REGION V							
Land in farms, acres	3,272,463	400,326	314,996	465,109	609,949	755,309	726,774
Percent distribution	100.0	12.2	9.6	14.2	18.6	23.1	22.2
Total cropland, acres	1,652,770	210,841	173,652	224,149	319,760	388,051	336,314
Percent of land in farms	50.5	52.7	55.1	48.2	52.4	51.4	46.3
Percent distribution	100.0	12.8	10.5	13.6	19.3	23.5	20.3
Cropland harvested, acres	1,111,184	145,468	120,497	162,443	227,577	260,729	194,470
Percent of total cropland	67.2	69.0	69.4	72.5	71.2	67.2	57.8
Percent distribution	100.0	13.1	10.8	14.6	20.5	23.5	17.5
Cropland for pasture, acres	380,962	53,913	43,228	42,137	64,397	87,328	89,650
Percent distribution	100.0	14.2	11.3	11.1	16.9	22.9	23.6
Percent of all cropland	23.0	25.6	24.9	18.9	20.1	22.5	26.7
Cropland not harvested and not pastured, acres	160,624	11,463	9,927	19,269	27,786	39,994	52,185
Percent distribution	100.0	7.1	6.2	12.0	17.3	24.9	32.5
Percent of all cropland	9.7	5.4	5.7	8.6	8.7	10.3	15.5
Open permanent pasture, acres	525,941	90,035	55,226	87,853	94,220	103,158	95,449
Percent distribution	100.0	17.1	10.5	16.7	17.9	19.6	18.2
Woodland pastured, acres	692,840	60,281	56,039	103,641	133,527	171,412	167,910
Percent distribution	100.0	8.7	8.1	15.0	19.3	24.7	24.2
Woodland not pastured, acres	318,463	29,304	22,324	41,320	48,621	72,369	104,525
Percent distribution	100.0	9.2	7.0	13.0	15.3	22.7	32.8
Other land, acres	82,449	9,862	7,755	8,146	13,821	20,319	22,546
Percent of farms reporting	78.5	93.5	87.5	73.8	74.6	73.2	84.2
Percent of all land in farms	2.5	2.5	2.5	1.8	2.3	2.7	3.1
Irrigated land in farms, acres	17,568	12,395	3,245	998	865	30	35
Percent distribution	100.0	70.5	18.5	5.7	4.9	0.2	0.2
Percent of farms reporting	1.1	30.2	8.3	2.3	1.8	0.2	0.1
Percent of total cropland	1.1	5.9	1.9	0.4	0.3	(Z)	(Z)
REGION VI							
Land in farms, acres	939,664	135,770	232,260	240,712	177,540	109,742	43,640
Percent distribution	100.0	14.5	24.7	25.6	18.9	11.7	4.6
Total cropland, acres	585,819	83,068	140,657	161,771	116,823	60,760	22,740
Percent of land in farms	62.3	61.2	60.6	67.2	65.8	55.4	52.1
Percent distribution	100.0	14.2	24.0	27.6	19.9	10.4	3.9
Cropland harvested, acres	495,546	65,059	115,830	141,197	102,185	52,830	18,445
Percent of total cropland	84.6	78.3	82.3	87.3	87.5	86.8	81.1
Percent distribution	100.0	13.1	23.4	28.5	20.6	10.7	3.7
Cropland for pasture, acres	43,213	8,508	10,363	7,149	8,433	5,895	2,865
Percent distribution	100.0	19.7	24.1	16.4	19.4	13.7	6.7
Percent of all cropland	21.5	31.5	31.7	20.4	21.5	21.5	14.6
Cropland not harvested and not pastured, acres	47,060	9,501	14,464	13,425	6,205	2,035	1,430
Percent distribution	100.0	20.2	30.7	28.5	13.2	4.3	3.1
Percent of all cropland	8.0	11.4	10.3	8.3	5.3	3.3	6.3
Open permanent pasture, acres	233,397	32,966	59,559	59,668	40,044	29,610	11,550
Percent distribution	100.0	14.1	25.5	25.6	17.2	12.7	4.9
Woodland pastured, acres	81,919	17,304	19,234	12,133	13,468	13,195	6,585
Percent distribution	100.0	21.1	23.4	14.8	16.5	16.1	8.1
Woodland not pastured, acres	17,809	337	10,265	2,797	1,500	2,050	860
Percent distribution	100.0	1.9	57.7	15.7	8.4	11.5	4.8
Other land, acres	20,720	2,095	2,545	4,343	5,705	4,127	1,905
Percent of farms reporting	2.2	1.5	1.1	1.8	3.2	3.8	4.4
Percent of all land in farms	81.6	82.1	85.5	83.1	81.2	81.8	76.5
Irrigated land in farms, acres	6,306	3,636	400	1,360	605	305	----
Percent distribution	100.0	57.7	6.3	21.6	9.6	4.8	----
Percent of farms reporting	1.5	9.5	0.6	2.0	1.7	1.1	----
Percent of total cropland	1.1	4.4	0.3	0.8	0.5	0.5	----

Z 0.05 percent or less.

TABLE 14.—LAND USE FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION VII							
Land in farms, acres	11,276,398	1,314,335	2,378,047	3,036,156	2,684,485	1,441,665	421,710
Percent distribution	100.0	11.7	21.1	26.9	23.8	12.8	3.7
Total cropland, acres	7,957,946	916,960	1,693,256	2,192,596	1,925,637	986,270	243,227
Percent of land in farms	70.6	69.8	71.2	72.2	71.7	68.4	57.7
Percent distribution	100.0	11.5	21.3	27.6	24.2	12.4	3.1
Cropland harvested, acres	6,501,564	799,793	1,396,242	1,793,010	1,549,891	781,639	180,989
Percent of total cropland	81.7	87.2	82.5	81.8	80.5	79.2	74.4
Percent distribution	100.0	12.3	21.5	27.6	23.8	12.0	2.8
Cropland for pasture, acres	704,177	64,184	146,846	197,555	171,288	96,235	28,069
Percent distribution	100.0	9.1	20.8	28.1	24.3	13.7	4.0
Percent of all cropland	8.8	7.0	8.7	9.0	8.9	9.8	11.5
Cropland not harvested and not pastured, acres	752,205	52,983	150,168	202,031	204,458	108,396	34,169
Percent distribution	100.0	7.0	20.0	26.9	27.2	14.4	4.5
Percent of all cropland	9.5	5.8	8.9	9.2	10.6	11.0	14.0
Open permanent pasture, acres	2,152,798	255,419	485,139	566,773	481,361	267,860	96,246
Percent distribution	100.0	11.9	22.5	26.3	22.4	12.4	4.5
Woodland pastured, acres	862,883	109,527	146,109	207,128	199,608	138,579	61,932
Percent distribution	100.0	12.7	16.9	24.0	23.1	16.1	7.2
Woodland not pastured, acres	77,511	7,681	15,329	11,890	20,996	12,510	9,105
Percent distribution	100.0	9.9	19.8	15.4	27.1	16.1	11.7
Other land, acres	225,260	24,748	38,214	57,769	56,883	36,446	11,200
Percent of farms reporting	81.7	86.6	85.5	85.6	82.7	78.2	74.1
Percent of all land in farms	2.0	1.9	1.6	1.9	2.1	2.5	2.7
Irrigated land in farms, acres	153,413	83,593	47,673	15,384	3,963	1,960	840
Percent distribution	100.0	54.5	31.1	10.0	2.6	1.3	0.5
Percent of farms reporting	3.4	25.8	13.5	3.7	1.0	0.7	1.0
Percent of total cropland	1.9	9.1	2.8	0.7	0.2	0.2	0.3
REGION VIII							
Land in farms, acres	1,128,563	647,862	268,359	119,640	54,915	29,637	8,150
Percent distribution	100.0	57.4	23.8	10.6	4.9	2.6	0.7
Total cropland, acres	919,109	512,408	228,245	103,495	44,430	23,381	7,150
Percent of land in farms	81.4	79.1	85.1	86.5	80.9	79.1	87.7
Percent distribution	100.0	55.8	24.8	11.3	4.8	2.5	0.8
Cropland harvested, acres	737,051	421,789	183,208	79,033	34,600	15,306	3,115
Percent of total cropland	80.2	82.3	80.3	76.3	77.9	65.4	43.6
Percent distribution	100.0	57.2	24.9	10.7	4.7	2.1	0.4
Cropland for pasture, acres	52,588	36,689	10,439	4,145	565	455	295
Percent distribution	100.0	69.8	19.8	7.8	1.1	0.9	0.6
Percent of all cropland	5.7	7.2	4.6	4.0	1.3	6.9	4.1
Cropland not harvested and not pastured, acres	129,470	53,930	34,598	20,317	9,265	7,620	3,740
Percent distribution	100.0	41.6	26.7	15.7	7.2	5.9	2.9
Percent of all cropland	47.6	46.4	50.4	51.3	47.9	41.0	38.9
Open permanent pasture, acres	56,716	39,465	11,146	5,375	705	25	----
Percent distribution	100.0	69.7	19.6	9.5	1.2	(Z)	----
Woodland pastured, acres	73,534	50,839	13,209	2,240	5,190	1,951	105
Percent distribution	100.0	69.1	18.0	3.0	7.1	2.7	0.1
Woodland not pastured, acres	15,566	10,336	1,650	800	405	2,370	5
Percent distribution	100.0	66.4	10.6	5.2	2.6	15.2	(Z)
Other land, acres	63,638	34,814	14,109	7,730	4,185	1,910	890
Percent of farms reporting	85.8	90.5	85.2	90.3	84.1	79.5	77.8
Percent of all land in farms	5.6	5.4	5.3	6.5	7.6	6.4	10.9
Irrigated land in farms, acres	484,807	288,300	110,574	53,270	21,970	8,683	2,010
Percent distribution	100.0	59.5	22.8	11.0	4.5	1.8	0.4
Percent of farms reporting	52.7	56.3	48.4	51.5	49.4	37.1	28.1
Percent of total cropland	83.1	85.1	80.2	84.1	85.6	83.5	75.9
REGION IX							
Land in farms, acres	6,657,656	3,201,171	2,140,313	762,566	362,010	171,231	20,335
Percent distribution	100.0	48.1	32.1	11.5	5.4	2.6	0.3
Total cropland, acres	5,232,355	2,530,229	1,780,409	569,629	239,690	105,588	6,810
Percent of land in farms	78.6	79.0	83.2	74.7	66.2	61.7	33.5
Percent distribution	100.0	48.4	34.0	10.9	4.6	2.0	0.1
Cropland harvested, acres	4,742,138	2,320,364	1,627,198	497,770	205,406	77,950	4,450
Percent of total cropland	90.6	92.1	91.4	87.4	85.7	73.8	65.3
Percent distribution	100.0	49.1	34.3	10.5	4.3	1.6	0.1
Cropland for pasture, acres	149,073	61,893	46,611	21,765	12,484	5,965	355
Percent distribution	100.0	41.5	31.3	14.6	8.4	4.0	0.2
Percent of all cropland	2.8	2.4	2.6	3.8	5.2	5.6	5.2
Cropland not harvested and not pastured, acres	341,144	138,972	106,600	50,094	21,800	21,673	2,005
Percent distribution	100.0	40.7	31.2	14.7	6.4	6.4	0.6
Percent of all cropland	6.5	5.5	6.0	8.8	9.1	20.5	29.4
Open permanent pasture, acres	1,269,285	612,664	307,231	165,948	108,687	62,555	12,200
Percent distribution	100.0	48.3	24.2	13.1	8.6	4.9	0.9
Woodland pastured, acres	31,368	7,294	8,245	11,374	3,425	825	205
Percent distribution	100.0	23.3	26.3	36.3	10.8	2.6	0.7
Woodland not pastured, acres	7,346	3,556	2,025	565	825	225	150
Percent distribution	100.0	48.4	27.6	7.7	11.2	3.1	2.0
Other land, acres	117,302	47,428	42,433	15,050	9,383	2,038	970
Percent of farms reporting	91.2	91.4	92.3	91.2	87.4	88.2	90.5
Percent of all land in farms	1.8	1.5	2.0	2.0	2.6	1.2	4.8
Irrigated land in farms, acres	1,930,642	1,313,214	553,303	53,270	9,080	1,700	75
Percent distribution	100.0	68.0	28.7	2.8	0.4	0.1	(Z)
Percent of farms reporting	60.6	90.5	69.6	31.3	15.2	12.3	4.8
Percent of total cropland	36.9	51.9	31.1	9.4	3.8	6.1	1.1

Z 0.05 percent or less.

TABLE 14.—LAND USE FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION X							
Land in farms, acres	6,433,116	5,434,874	666,100	216,811	97,146	16,370	1,815
Percent distribution	100.0	84.5	10.4	3.4	1.5	0.3	(Z)
Total cropland, acres	3,506,076	3,000,211	345,310	108,799	38,968	11,333	1,455
Percent of land in farms	54.5	55.2	51.8	50.2	40.2	68.9	80.2
Percent distribution	100.0	85.6	9.8	3.1	1.1	0.3	(Z)
Cropland harvested, acres	2,686,385	2,310,230	256,739	81,886	28,022	8,418	1,090
Percent of total cropland	76.6	77.0	74.3	75.3	71.8	74.3	74.9
Percent distribution	100.0	86.0	9.6	3.0	1.0	0.3	(Z)
Cropland for pasture, acres	174,052	134,635	30,691	5,377	2,226	1,075	45
Percent distribution	100.0	77.4	17.6	3.1	1.3	0.6	(Z)
Percent of all cropland	5.0	4.5	8.9	4.9	5.7	9.5	3.1
Cropland not harvested and not pastured, acres	645,639	555,346	57,877	21,536	8,720	1,840	320
Percent distribution	100.0	86.0	9.0	3.3	1.3	0.3	0.1
Percent of all cropland	18.4	18.5	16.8	19.8	22.4	16.2	22.0
Open permanent pasture, acres	2,516,417	2,153,607	264,556	76,103	20,114	1,982	25
Percent distribution	100.0	85.6	10.5	3.0	0.8	0.1	(Z)
Woodland pastured, acres	110,307	56,895	7,115	16,096	30,171		
Percent distribution	100.0	51.6	6.4	14.6	27.4		
Woodland not pastured, acres	17,787	10,189	3,518	1,995	2,050	25	10
Percent distribution	100.0	57.3	19.7	11.2	11.5	0.2	0.1
Other land, acres	282,529	213,972	45,571	13,818	5,813	3,030	325
Percent of farms reporting	91.3	92.0	94.1	94.2	87.3	86.5	47.4
Percent of all land in farms	4.4	3.9	6.8	6.4	6.0	18.5	17.9
Irrigated land in farms, acres	2,737,100	2,351,018	266,878	80,159	28,692	9,228	1,125
Percent distribution	100.0	85.9	9.8	2.9	1.1	0.3	(Z)
Percent of farms reporting	99.4	99.5	99.8	99.0	98.9	98.5	100.0
Percent of total cropland	78.1	78.4	74.3	73.7	73.6	81.4	77.3

Z 0.05 percent or less.

Cotton farms in Region VIII have, for all economic classes, a higher ratio of cropland to all land than is found in any other region. The range by economic class is from almost 80 to about 90 percent. The highest percentage of cropland is found on Class VI farms. This differs from the pattern observed in the other seven regions, but appears to be what might logically be expected of small farms in an irrigated region.

In the High Plains of Texas (Region IX) cropland accounts for around 80 percent of all land for farms in Classes I, II, and III. These three classes comprise about 85 percent of all cotton farms in this region. The ratio of cropland to all land drops to 66 percent for Class IV farms, 62 percent for Class V, and 34 percent for Class VI. Virtually all noncropland is classed as open pasture.

The irrigated cotton farms of the West (Region X) exhibit, from Classes I through IV (about 95 percent of all cotton farms are encompassed by these economic classes), a ratio of cropland to total land which is about the same as that found in the rougher wooded regions of the East. The probable explanation here is that available water for irrigation is the limiting factor in determining the amount of cropland. In the absence of water for irrigation most of this land is suitable only for rather extensive types of utilization. Many of the larger operators probably controlled large acreages of this land before the advent of irrigation. Class VI farms in Region X have an average of more than 80 percent of all land in cropland, and on Class V farms the percentage is about 70.

The data on land use for individual regions show some interesting facts about the distribution of irrigated land. Irrigation is an influential element on cotton farms only in Regions VIII, IX, and X. These regions have about 95 percent of the 10-region total acreage of irrigated land on cotton farms. In Region X, of course, practically no cotton is or can be grown except under irrigation. In Regions VIII and IX, on the other hand, this crop is also grown without irrigation. Since available moisture is the limiting factor for growing cotton in each of these regions, the yields on nonirrigated land are only one-fourth to one-half as high as those on irrigated land.

In Region IX only Class I farms appear, on the average, to have enough irrigated land to permit all cotton acreage to be grown under irrigation. For Class II farms in this region it would appear that irrigated land is available for about 70 percent of the cotton acreage, while on Class III farms the average acreage of irrigated land is only about 25 percent of the average acres of cotton harvested. In this region farms in Economic Classes IV through VI have very little irrigated land.

Apparently, in Region VIII, the extent of irrigated land available is about equal to cotton acreage harvested on farms in Classes I through IV, but is somewhat less than cotton acreage for farms in Classes V and VI. In these two classes a very large proportion of the available cropland seemed to be idle.

LAND USE AND ENTERPRISE ORGANIZATION PER FARM

The data available in table 15 permit examination of the use of the land resource as it is found on typical farms for each economic class.

Total Acres Per Farm

In all regions farms in Economic Class I have relatively large acreages of land. In The Lower Rio Grande Valley (Region VIII) the average land size for Class I farms is smaller than for any other region. Their average size here is 710 acres. The highest average land area for this largest size-of-business group is found in Region II, the Southern Piedmont, where Class I farms average more than 2,000 acres. After Region II, the largest average total acreages per Class I farm are found in Regions I, III, V, VII, and X. In each of these 5 regions the average Class I farm has well over 1,000 acres of land.

Class I farms in the 3 remaining regions (IV, VI, and IX) have average total acre-size ranging from about 760 acres in The High Plains of Texas (Region IX) to around 990 acres in the "Mississippi Delta" (Region IV).

The average acre-size of Class II farms is very substantially smaller in all regions than those of farms in Economic Class I. The range for the 10 areas is from a little over 700 acres in Region II to just over 200 acres in Region VIII. It will be recognized that these are the same regions in which the largest and smallest average acre-size for Class I farms are found.

In general the average acreage for Class III farms is about one-third to one-half that for farms in Class II. The range among our regions for Class III farms is from highs of around 320 acres in Regions IX and VII to lows of just over 100 acres in Regions IV, VIII, and X.

With respect to average total acreage per farm in Economic Classes IV through VI, three distinct groups of regions are discernible. In reference to the range among the ten regions in average acreage size for each of these three economic classes, the three regional groups may be termed the high group, the low group, and the medium group.

The high group is composed of Regions V, VII, and IX. Within this regional group region average acreages for Class IV farms range from about 165 to about 250. The range for Class V farms is from just over 100 to about 220 acres, while for Class VI farms the range of region average acreages per farm is from 80 to about 190 acres. Various combinations of low yields and relatively large amounts of noncropland result in these relatively large average acreages for farms in these economic classes in this regional group.

The regional group having relatively low average acres per farm for Economic Classes IV through VI is comprised of Regions IV, VIII, and X. The ranges within this group for regional average acreage per farm are: From about 50 to 80 acres for farms in Class IV, from about 25 to 40 acres for Class V farms, and from 10 to 30 acres for farms in Class VI. These relatively low average acreages per farm are probably the result of both high yields per acre, and relatively small acreages of noncropland per farm.

The medium group with respect to region-average acre-sizes of farms in Classes IV through VI is comprised of the remaining four regions. These are Regions I, II, III, and VI. The ranges in region-average acres per farm for this regional group are: For Class IV farms, from about 75 to around 110 acres; for Class V farms, from 60 to 75 acres; and for Class VI farms, from about 40 to 60 acres.

TABLE 15.—LAND USE ON COTTON FARMS PER FARM, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
All farms—number	57,374	287	1,234	4,399	14,858	20,841	15,755
All land in farms—acres per farm	105	1,831	620	203	101	74	52
Total cropland—do	61	946	314	119	64	45	28
Cropland harvested—do	51	753	252	101	56	38	22
Cropland used only for pasture:							
Acres per farm reporting	22	172	79	25	20	15	10
Percent of farms reporting	20.3	65.5	49.3	30.3	21.4	18.3	16.1
Cropland not harvested and not pastured:							
Acres per farm reporting	22	185	67	37	20	17	15
Percent of farms reporting	25.3	43.9	35.4	27.0	20.1	24.1	30.0
Open permanent pasture, acres:							
Acres per farm reporting	29	266	100	33	24	16	11
Percent of farms reporting	12.1	41.8	35.4	18.8	11.9	11.6	8.9
Percent of land in farms	3.3	6.1	5.7	3.1	2.8	2.5	1.9
Woodland pastured, acres:							
Acres per farm reporting	47	320	138	64	50	34	27
Percent of farms reporting	25.5	55.1	51.9	35.2	24.3	24.0	23.3
Percent of land in farms	11.4	9.6	11.6	11.2	12.1	10.8	12.3
Woodland not pastured, acres:							
Acres per farm reporting	71	670	272	120	61	49	37
Percent of farms reporting	37.1	85.0	68.9	43.0	32.5	35.4	38.5
Percent of land in farms	24.9	31.1	30.2	25.4	19.7	23.5	27.8
Average specified crops:							
Cotton:							
Acres per farm	16	225	74	33	19	12	7
Percent of cropland harvested	32.1	29.8	29.4	32.5	34.6	31.7	30.4
Corn for all purposes:							
Acres per farm reporting	23	183	91	41	26	20	12
Percent of farms reporting	92.7	90.9	93.6	95.0	93.8	92.7	91.0
Percent of cropland harvested	42.0	22.2	33.9	38.0	43.4	47.3	50.5
Tobacco:							
Acres per farm reporting	2	9	5	4	3	2	1
Percent of farms reporting	15.4	19.5	16.9	22.1	20.7	14.9	9.1
Percent of cropland harvested	0.7	0.2	0.3	0.8	1.0	0.7	0.5
Peanuts for all purposes:							
Acres per farm reporting	11	79	38	21	13	9	5
Percent of farms reporting	39.8	33.1	50.3	48.5	44.3	41.6	29.9
Percent of cropland harvested	8.8	3.4	7.6	9.9	10.3	9.3	7.1
All hay:							
Acres—percent of cropland harvested	2.6	5.6	3.2	2.4	2.1	2.1	3.1
Acres of specified crops as percent of cropland harvested	86.1	61.2	74.4	83.6	91.3	91.1	91.6

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION II							
All farms—number	40,263	23	180	747	4,803	16,027	18,483
All land in farms—acres per farm	80	2,160	723	298	113	75	58
Total cropland—do	40	960	327	151	64	39	26
Cropland harvested—do	31	683	221	104	50	31	19
Cropland used only for pasture:							
Acres per farm reporting	19	295	146	58	25	16	12
Percent of farms reporting	19.6	69.6	46.1	46.6	25.3	18.9	17.4
Cropland not harvested and not pastured:							
Acres per farm reporting	17	182	70	43	24	17	13
Percent of farms reporting	33.6	39.1	55.6	44.7	28.9	29.8	37.5
Open permanent pasture, acres:							
Acres per farm reporting	17	211	128	72	23	15	11
Percent of farms reporting	53.9	47.8	67.8	45.9	34.5	33.2	33.5
Percent of land in farms	7.2	4.7	12.0	11.1	7.0	6.8	6.6
Woodland pastured, acres:							
Acres per farm reporting	28	542	147	64	34	26	22
Percent of farms reporting	40.1	87.0	87.2	59.8	41.3	38.6	39.9
Percent of land in farms	14.1	21.8	17.7	12.9	12.6	13.4	15.0
Woodland not pastured, acres:							
Acres per farm reporting	46	767	225	107	51	46	38
Percent of farms reporting	43.9	78.3	74.4	63.3	46.2	40.3	45.3
Percent of land in farms	25.5	27.8	23.2	22.8	21.1	24.6	29.6
Average specified crops:							
Cotton:							
Acres per farm	12	219	83	39	22	13	7
Percent of cropland harvested	40.6	32.0	37.5	37.8	44.3	42.6	36.6
Corn for all purposes:							
Acres per farm reporting	11	118	45	24	14	11	8
Percent of farms reporting	90.3	95.7	89.4	89.0	91.6	90.5	89.7
Percent of cropland harvested	31.2	16.5	18.3	20.2	25.8	31.5	38.7
Wheat:							
Acres per farm reporting	6	155	29	17	9	6	4
Percent of farms reporting	30.9	39.1	53.9	55.2	42.0	34.4	23.7
Percent of cropland harvested	6.5	8.9	7.0	9.0	7.1	6.5	5.2
Oats:							
Acres per farm reporting	10	124	62	29	14	8	5
Percent of farms reporting	27.3	78.3	69.4	65.7	40.4	28.1	21.2
Percent of cropland harvested	8.8	14.2	19.4	18.0	10.9	7.3	6.0
All hay:							
Acres—percent of cropland harvested	10.7	15.9	15.6	12.7	10.7	10.0	10.4
Acres of specified crops as percent of cropland harvested	97.8	87.5	97.8	97.7	98.8	97.9	96.9

TABLE 15.—LAND USE ON COTTON FARMS PER FARM, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION III							
All farms ..... number	171,185	475	1,672	6,888	32,740	69,768	59,642
All land in farms ... acres per farm	81	1,568	556	197	95	65	53
Total cropland ..... do	40	790	277	105	53	33	22
Cropland harvested ..... do	31	571	193	77	42	26	16
Cropland used only for pasture:							
Acres per farm reporting	25	270	123	48	25	18	14
Percent of farms reporting	22.9	63.8	49.2	39.4	27.9	21.0	19.5
Cropland not harvested and not pastured:							
Acres per farm reporting	16	163	73	30	18	14	11
Percent of farms reporting	24.4	28.6	33.0	29.3	22.9	22.2	27.1
Open permanent pasture, acres:							
Acres per farm reporting	26	451	192	62	29	21	16
Percent of farms reporting	34.3	44.6	41.9	35.2	34.3	33.8	34.6
Percent of land in farms	11.0	12.8	14.5	11.1	10.3	10.8	10.5
Woodland pastured, acres:							
Acres per farm reporting	39	524	188	80	40	35	29
Percent of farms reporting	36.7	44.8	49.2	38.4	33.6	33.9	41.0
Percent of land in farms	17.6	15.0	16.7	15.6	14.1	18.0	22.1
Woodland not pastured, acres:							
Acres per farm reporting	48	518	206	94	49	39	36
Percent of farms reporting	29.4	57.1	41.6	34.8	30.0	27.5	30.1
Percent of land in farms	17.3	18.8	15.4	16.5	15.3	16.6	20.7
Average specified crops:							
Cotton:							
Acres per farm	13	209	70	32	18	11	6
Percent of cropland harvested	40.5	36.6	36.2	41.1	42.6	41.8	37.4
Corn for all purposes:							
Acres per farm reporting	16	14	119	30	19	13	9
Percent of farms reporting	90.7	88.6	90.3	91.7	91.7	90.9	89.7
Percent of cropland harvested	42.4	18.5	27.4	36.0	42.4	45.8	51.1
Soybeans:							
Acres per farm reporting	15	258	83	25	13	6	3
Percent of farms reporting	10.0	49.9	38.2	22.0	14.5	9.0	6.2
Percent of cropland harvested	4.9	22.5	16.5	7.0	4.4	2.0	1.3
All hay:							
Acres—percent of cropland harvested	7.2	9.0	10.9	9.6	6.7	6.5	6.1
Acres of specified crops as percent of cropland harvested	95.0	86.7	91.0	93.7	96.1	96.1	96.0
REGION IV							
All farms ..... number	128,046	2,991	5,956	15,075	35,824	50,913	17,287
All land in farms ... acres per farm	75	994	262	102	48	28	25
Total cropland ..... do	55	698	194	77	36	20	15
Cropland harvested ..... do	47	604	170	69	32	17	11
Cropland used only for pasture:							
Acres per farm reporting	25	140	40	18	14	13	14
Percent of farms reporting	18.5	50.6	39.9	29.5	18.1	12.4	14.9
Cropland not harvested and not pastured:							
Acres per farm reporting	20	92	42	22	14	12	10
Percent of farms reporting	12.4	25.1	18.8	14.0	12.2	9.7	14.9
Open permanent pasture, acres:							
Acres per farm reporting	27	211	52	24	15	13	16
Percent of farms reporting	11.5	21.9	17.6	13.9	12.7	8.9	10.8
Percent of land in farms	4.2	4.6	3.5	3.3	4.0	4.3	6.9
Woodland pastured, acres:							
Acres per farm reporting	51	271	105	57	33	26	26
Percent of farms reporting	12.6	29.0	18.8	14.9	12.1	9.7	15.2
Percent of land in farms	8.5	7.9	7.5	8.4	8.3	9.2	15.5
Woodland not pastured, acres:							
Acres per farm reporting	63	305	114	51	36	29	28
Percent of farms reporting	12.9	42.2	24.9	17.9	12.5	8.7	12.3
Percent of land in farms	10.8	13.0	10.9	9.0	9.3	9.1	13.8
Average specified crops:							
Cotton:							
Acres per farm	23	236	69	34	19	11	7
Percent of cropland harvested	49.3	39.0	40.8	49.1	59.1	65.0	61.9
Corn for all purposes:							
Acres per farm reporting	12	70	28	15	10	7	6
Percent of farms reporting	56.5	72.0	74.8	67.5	60.6	51.1	45.1
Percent of cropland harvested	14.3	8.4	12.3	15.0	18.6	20.1	24.0
Oats:							
Acres per farm reporting	32	121	37	18	9	7	5
Percent of farms reporting	6.9	45.2	22.8	11.1	6.4	3.3	3.1
Percent of cropland harvested	4.6	9.1	5.0	2.9	1.9	1.4	1.5
Soybeans:							
Acres per farm reporting	44	229	78	39	19	12	9
Percent of farms reporting	28.0	84.7	81.1	54.0	29.0	16.1	10.3
Percent of cropland harvested	26.0	32.1	37.2	30.3	17.5	10.8	7.9
Rice:							
Acres per farm reporting	83	221	44	42	16	7	2
Percent of farms reporting	0.5	6.0	1.0	0.7	0.6	0.1	(Z)
Percent of cropland harvested	0.8	2.2	0.3	0.4	0.3	(Z)	(Z)
All hay:							
Acres—percent of cropland harvested	3.7	5.2	4.0	2.8	3.2	2.2	4.0
Acres of specified crops as percent of cropland harvested	98.7	96.0	99.6	100.5	100.6	99.5	99.3

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION V							
All farms ..... number	22,257	215	552	1,521	3,672	7,194	9,103
All land in farms ... acres per farm	147	1,862	571	306	166	105	80
Total cropland ..... do	74	981	315	147	87	54	37
Cropland harvested ..... do	50	677	218	107	62	36	21
Cropland used only for pasture:							
Acres per farm reporting	51	499	158	80	51	41	28
Percent of farms reporting	33.7	50.2	49.5	34.8	34.2	30.0	34.9
Cropland not harvested and not pastured:							
Acres per farm reporting	28	176	66	47	35	25	19
Percent of farms reporting	25.9	30.2	27.4	26.7	21.6	21.9	30.4
Open permanent pasture, acres:							
Acres per farm reporting	65	826	225	130	74	41	29
Percent of farms reporting	36.2	50.7	44.4	44.6	34.5	34.8	36.1
Percent of land in farms	16.1	22.5	17.5	18.9	15.4	13.7	13.1
Woodland pastured, acres:							
Acres per farm reporting	70	494	230	163	89	60	37
Percent of farms reporting	44.8	56.7	44.2	41.7	41.0	39.9	50.4
Percent of land in farms	21.2	15.1	17.8	22.3	21.9	22.7	23.1
Woodland not pastured, acres:							
Acres per farm reporting	66	651	186	140	70	55	44
Percent of farms reporting	21.7	20.9	21.7	19.5	18.8	18.3	25.9
Percent of land in farms	9.7	7.3	7.1	8.9	8.0	9.6	14.4
Average specified crops:							
Cotton:							
Acres per farm	26	327	105	57	34	20	10
Percent of cropland harvested	51.8	48.3	48.2	53.2	55.4	55.8	45.8
Corn for all purposes:							
Acres per farm reporting	14	89	36	23	17	12	9
Percent of farms reporting	81.6	73.5	76.6	79.2	79.0	78.2	86.2
Percent of cropland harvested	22.1	9.6	12.5	17.1	22.0	26.2	36.1
Oats:							
Acres per farm reporting	25	130	35	24	13	9	8
Percent of farms reporting	4.2	29.8	26.4	10.3	6.3	2.8	1.5
Percent of cropland harvested	2.1	5.7	4.2	2.3	1.4	0.7	0.6
Soybeans for all purposes:							
Acres per farm reporting	42	184	98	56	24	16	7
Percent of farms reporting	6.9	29.3	36.4	19.0	12.8	4.6	2.1
Percent of cropland harvested	5.9	8.0	16.4	10.0	5.0	2.0	0.6
All hay:							
Acres—percent of cropland harvested	9.8	17.1	11.2	11.3	8.2	7.6	7.1
Acres of specified crops as percent of cropland harvested	91.7	88.8	92.6	93.9	92.0	92.3	90.2
REGION VI							
All farms ..... number	7,995	168	773	1,776	2,397	1,816	1,065
All land in farms ... acres per farm	118	808	300	136	74	60	41
Total cropland ..... do	73	494	182	91	49	33	21
Cropland harvested ..... do	62	387	150	80	43	29	17
Cropland used only for pasture:							
Acres per farm reporting	25	161	42	20	16	15	18
Percent of farms reporting	21.5	31.5	31.7	20.4	21.5	21.5	14.6
Cropland not harvested and not pastured:							
Acres per farm reporting	24	120	46	21	12	8	9
Percent of farms reporting	24.5	47.0	40.5	35.5	21.7	14.0	15.0
Open permanent pasture, acres:							
Acres per farm reporting	55	320	123	53	32	35	27
Percent of farms reporting	53.2	61.3	62.9	63.6	52.4	46.8	40.4
Percent of land in farms	24.8	24.3	25.7	24.8	22.6	27.0	26.5
Woodland pastured, acres:							
Acres per farm reporting	76	385	150	91	55	46	28
Percent of farms reporting	13.4	26.8	16.6	7.5	10.3	15.7	22.1
Percent of land in farms	8.7	12.7	8.3	5.0	7.6	12.0	15.1
Woodland not pastured, acres:							
Acres per farm reporting	70	56	684	42	21	40	19
Percent of farms reporting	3.2	3.6	1.9	3.7	2.9	2.8	4.2
Percent of land in farms	1.9	0.2	4.4	1.2	0.8	1.9	2.0
Average specified crops:							
Cotton:							
Acres per farm reporting	32	205	84	41	22	13	7
Percent of cropland harvested	52.0	53.0	56.4	52.2	51.8	45.0	42.1
Corn for all purposes:							
Acres per farm reporting	16	46	29	20	13	11	9
Percent of farms reporting	87.8	75.0	89.0	91.3	91.7	84.0	80.8
Percent of cropland harvested	22.6	8.9	17.1	23.3	28.3	31.8	42.0
Sorghum for all purposes:							
Acres per farm reporting	21	126	45	16	9	7	3
Percent of farms reporting	32.8	67.3	52.4	48.1	29.2	20.1	17.4
Percent of cropland harvested	11.3	21.8	15.8	9.8	6.4	5.2	3.0
Sweetpotatoes:							
Acres per farm reporting	5	1	.....	7	6	4	1
Percent of farms reporting	22.1	15.5	10.5	21.7	24.9	23.7	23.5
Percent of cropland harvested	1.6	(Z)	.....	0.8	4.2	4.5	1.0
All hay:							
Acres—percent of cropland harvested	5.0	4.2	4.1	5.0	4.2	8.0	10.6
Acres of specified crops as percent of cropland harvested	92.5	87.9	93.4	91.1	94.9	94.5	98.7

Z 0.05 percent or less.

TABLE 15.—LAND USE ON COTTON FARMS PER FARM, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION VII							
All farms—number	44,947	1,194	4,441	9,467	13,812	11,373	4,660
All land in farms—acres per farm	251	1,101	535	321	194	127	90
Total cropland—do	177	768	381	232	139	87	52
Cropland harvested—do	145	670	314	189	112	69	39
Cropland used only for pasture:							
Acres per farm reporting	39	126	70	44	30	25	23
Percent of farms reporting	39.7	42.7	47.4	47.9	41.2	33.4	25.8
Cropland not harvested and not pastured:							
Acres per farm reporting	45	133	79	51	39	28	25
Percent of farms reporting	37.4	33.3	42.8	41.6	38.3	34.5	29.2
Open permanent pasture, acres:							
Acres per farm reporting	91	535	213	104	66	45	44
Percent of farms reporting	52.4	39.9	51.2	57.4	52.9	51.8	46.5
Percent of land in farms	19.1	19.4	20.4	18.7	17.9	18.6	22.8
Woodland pastured, acres:							
Acres per farm reporting	100	615	214	129	77	57	52
Percent of farms reporting	19.3	14.9	15.4	16.9	18.8	21.2	25.4
Percent of land in farms	7.7	8.3	6.1	6.8	7.4	9.6	14.7
Woodland not pastured, acres:							
Acres per farm reporting	43	154	79	31	37	31	40
Percent of farms reporting	4.1	4.2	4.4	4.1	4.1	3.5	4.8
Percent of land in farms	0.7	0.6	0.6	0.4	0.8	0.9	2.2
Average specified crops:							
Cotton:							
Acres per farm	71	299	153	95	57	35	19
Percent of cropland harvested	49.3	44.6	48.8	49.9	50.7	50.9	49.6
Sorghum:							
Acres per farm reporting	57	296	112	62	37	24	14
Percent of farms reporting	64.9	87.7	81.1	75.6	64.7	55.9	44.1
Percent of cropland harvested	25.7	38.8	28.8	24.7	21.6	19.4	16.0
Corn for all purposes:							
Acres per farm reporting	25	60	44	37	25	18	12
Percent of farms reporting	53.1	26.6	33.9	44.3	55.5	62.8	65.3
Percent of cropland harvested	9.2	2.4	4.7	8.7	12.2	16.5	20.6
Small grains:							
Percent of cropland harvested	6.1	7.1	7.9	6.4	5.4	3.4	2.7
All hay:							
Acres—percent of cropland harvested	4.1	3.1	3.6	4.2	4.4	5.2	5.4
Acres of specified crops as percent of cropland harvested	94.4	95.9	93.8	93.8	94.2	95.4	94.2
REGION VIII							
All farms—number	5,299	913	1,307	1,142	911	756	270
All land in farms—acres per farm	213	710	205	105	60	39	30
Total cropland—do	173	561	175	91	49	31	26
Cropland harvested—do	139	462	140	69	38	20	12
Cropland used only for pasture:							
Acres per farm reporting	49	141	31	14	8	6	10
Percent of farm reporting	20.2	28.6	26.0	25.9	8.2	9.3	11.1
Cropland not harvested and not pastured:							
Acres per farm reporting	51	127	53	35	21	25	36
Percent of farms reporting	47.6	46.4	50.4	51.3	47.9	41.0	38.9
Open permanent pasture, acres:							
Acres per farm reporting	140	362	100	41	14	5	------
Percent of farms reporting	7.7	11.9	8.5	11.5	5.5	0.7	------
Percent of land in farms	5.0	6.1	4.2	4.5	1.3	0.1	------
Woodland pastured, acres:							
Acres per farm reporting	318	1,182	155	37	247	122	21
Percent of farms reporting	4.4	4.7	6.5	5.3	2.3	2.1	1.9
Percent of land in farms	6.5	7.8	4.9	1.9	9.5	6.6	1.3
Woodland not pastured, acres:							
Acres per farm reporting	177	369	82	53	40	237	1
Percent of farms reporting	1.7	3.1	1.5	1.3	1.1	1.3	1.9
Percent of land in farms	1.4	1.6	0.6	0.7	0.7	8.0	0.1
Average specified crops:							
Cotton:							
Acres per farm	80	257	80	44	22	13	8
Percent of cropland harvested	57.3	55.6	57.3	64.2	57.7	63.4	73.0
Corn for all purposes:							
Acres per farm reporting	13	33	13	9	7	7	4
Percent of farms reporting	30.2	29.1	32.9	36.4	25.9	21.2	33.3
Percent of cropland harvested	2.9	2.1	3.1	4.6	4.7	7.4	10.4
Sorghum for all purposes:							
Acres per farm reporting	72	167	59	28	13	12	4
Percent of farms reporting	46.4	73.6	54.4	50.4	32.5	21.2	16.7
Percent of cropland harvested	23.9	26.6	22.8	20.1	11.0	12.3	5.1
All hay:							
Acres—percent of cropland harvested	1.6	1.9	0.9	1.3	1.6	2.5	------
Acres of specified crops as percent of cropland harvested	85.7	86.2	84.1	90.2	75.0	85.6	88.5

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION IX							
All farms—number	14,650	4,195	5,797	2,344	1,438	771	105
All land in farms—acres per farm	454	763	369	325	252	222	194
Total cropland—do	357	603	307	243	167	137	65
Cropland harvested—do	324	555	281	212	143	101	42
Cropland used only for pasture:							
Acres per farm reporting	26	40	20	22	23	26	18
Percent of farms reporting	39.2	37.2	41.0	43.1	37.7	29.8	19.0
Cropland not harvested and not pastured:							
Acres per farm reporting	68	89	58	63	48	74	50
Percent of farms reporting	34.0	37.2	31.8	33.8	31.8	37.9	38.1
Open permanent pasture, acres:							
Acres per farm reporting	183	306	125	142	135	150	152
Percent of farms reporting	47.3	47.7	42.4	49.7	56.1	54.0	76.2
Percent of land in farms	19.1	19.1	14.4	21.8	30.0	36.5	60.0
Woodland pastured, acres:							
Acres per farm reporting	130	228	113	140	110	55	20
Percent of farms reporting	1.7	0.8	1.3	3.5	2.2	1.9	9.5
Percent of land in farms	0.5	0.2	0.4	1.5	0.9	0.5	1.0
Woodland not pastured, acres:							
Acres per farm reporting	74	102	72	94	82	15	30
Percent of farms reporting	0.7	0.8	0.5	0.3	0.7	1.9	4.8
Percent of land in farms	0.1	0.1	0.1	0.1	0.2	0.1	0.7
Average specified crops:							
Cotton:							
Acres per farm reporting	144	241	128	97	63	47	17
Percent of cropland harvested	44.4	43.3	45.5	45.8	44.0	46.4	39.9
Sorghum for all purposes:							
Acres per farm reporting	164	270	143	107	75	56	32
Percent of farms reporting	95.3	97.8	97.2	95.9	89.4	81.7	57.1
Percent of cropland harvested	48.3	47.6	49.6	48.1	46.8	45.7	43.8
Wheat:							
Acres per farm reporting	86	132	55	58	50	31	36
Percent of farms reporting	17.6	25.3	14.7	14.8	15.0	11.0	14.3
Percent of cropland harvested	4.7	6.0	2.9	4.0	5.3	3.4	12.1
All hay:							
Acres—percent of cropland harvested	0.8	0.9	0.6	0.8	1.3	1.1	3.8
Acres of specified crops as percent of cropland harvested	98.1	97.8	98.6	98.7	97.3	96.6	99.7
REGION X							
All farms—number	11,858	4,502	3,066	2,035	1,389	676	190
All land in farms—acres per farm	543	1,207	217	107	70	24	10
Total cropland—do	296	666	113	53	28	17	8
Cropland harvested—do	227	513	84	40	20	12	6
Cropland used only for pasture:							
Acres per farm reporting	61	114	35	12	9	13	3
Percent of farms reporting	24.2	26.3	28.7	22.2	18.5	12.6	7.9
Cropland not harvested and not pastured:							
Acres per farm reporting	138	257	50	31	20	11	9
Percent of farms reporting	39.4	48.0	37.9	34.3	31.8	25.9	18.4
Open permanent pasture, acres:							
Acres per farm reporting	1,292	2,439	496	258	106	64	2
Percent of farms reporting	16.4	19.6	17.4	14.5	13.7	4.6	7.9
Percent of land in farms	39.1	39.6	39.7	35.1	20.7	12.1	1.4
Woodland pastured, acres:							
Acres per farm reporting	829	1,211	149	671	2,155	------	------
Percent of farms reporting	1.1	1.0	1.6	1.2	1.0	------	------
Percent of land in farms	1.7	1.0	1.1	7.4	31.1	------	------
Woodland not pastured, acres:							
Acres per farm reporting	95	170	75	56	68	5	2
Percent of farms reporting	1.6	1.3	1.5	2.0	2.2	0.7	2.6
Percent of land in farms	6.3	0.2	0.5	0.9	2.1	0.2	0.6
Average specified crops:							
Cotton:							
Acres per farm	108	238	45	23	14	8	5
Percent of cropland harvested	47.7	46.5	53.2	56.6	70.8	64.7	81.7
Sorghum for all purposes:							
Acres per farm reporting	65	160	28	22	11	17	6
Percent of farms reporting	23.9	33.6	26.6	15.9	8.0	8.3	5.3
Percent of cropland harvested	6.8	6.5	8.9	8.7	4.3	11.3	5.5
Barley:							
Acres per farm reporting	222	309	35	25	17	14	------
Percent of farms reporting	24.5	44.4	19.4	11.9	4.0	2.2	------
Percent of cropland harvested	24.0	26.7	8.0	7.3	3.5	2.5	------
Irish potatoes:							
Acres per farm reporting	56	67	12	2	------	------	------
Percent of farms reporting	2.9	6.2	1.6	0.7	------	------	------
Percent of cropland harvested	0.7	0.8	0.2	(Z)	------	------	------
Alfalfa mixtures:							
Percent of cropland harvested	13.3	12.5	20.4	15.1	11.4	7.4	3.2
Acres of specified crops as percent of cropland harvested	93.6	94.2	91.2	87.6	89.0	85.9	90.4

Z 0.05 percent or less.

Cropland and Cropland Use

As cotton farms are, by definition, those on which sales of cotton and cottonseed account for 50 percent or more of total farm sales, they depend primarily upon the cropland component of their land resources. For this reason the size and utilization of the cropland resources merit examination for the various economic classes of cotton farms. An examination of the enterprise utilization of the cropland resource also gives a useful indication of possible short-term alternative cropland uses.

In general, region average acreages of cropland per farm show about the same patterns of variations among the ten regions for each economic class of farm as the average acreages of all land in farms, which were discussed above.

The approximate range in region-averages of cropland per farm for each economic class is as follows:

Class I—from about 980 acres (Region VI) to about 500 acres (Region V).

Class II—from about 380 acres (Region X) to about 115 acres (Region VII).

Class III—from about 240 acres (Region IX) to about 55 acres (Region X).

Class IV—from about 165 acres (Region IX) to 28 acres (Region X).

Class V—from about 135 acres (Region IX) to about 15 acres (Region X).

Class VI—from 65 acres (Region IX) to about 10 acres (Region X).

In general, as was the case with average total acres per farm, the region-averages of cropland per farm for Classes III through VI tend to fall in three groups. Regions V, VII, and IX have relatively large average acreages of cropland for farms in these economic classes. Regions IV, VIII, and X have relatively small averages of cropland acreage, and Regions I, II, III, and VI have cropland averages per farm that fall between those of the other two regional groups.

TABLE 16.—PERCENT DISTRIBUTION FOR ALL COMMERCIAL FARMS AND FOR COTTON FARMS IN EACH ECONOMIC CLASS, BY ACRES IN FARM, BY REGIONS: 1954

Region and size of farm	All commercial farms	Cotton farms by economic class of farm						
		All classes	I	II	III	IV	V	VI
REGION I								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	3.7	2.6	------	------	------	(Z)	0.9	8.4
10 to 49 acres	37.7	45.0	------	------	13.6	37.3	49.6	59.4
50 to 99 acres	22.2	25.3	------	1.6	25.5	31.0	27.2	19.5
100 to 219 acres	20.9	18.3	3.4	16.3	33.8	23.0	17.8	10.4
220 to 499 acres	10.0	6.1	5.2	39.7	18.5	7.2	3.9	1.9
500 to 999 acres	3.4	1.8	23.0	28.0	7.2	1.2	0.5	0.3
1,000 acres and over	2.1	0.9	68.4	14.4	1.4	0.3	0.1	0.1
REGION II								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	4.5	3.1	------	------	------	0.1	0.4	6.4
10 to 49 acres	34.0	48.7	------	------	5.4	34.2	51.4	52.5
50 to 99 acres	23.7	24.3	------	------	17.4	27.3	24.4	23.9
100 to 219 acres	23.8	18.1	------	11.1	26.8	27.5	18.7	14.9
220 to 499 acres	9.6	4.6	------	38.9	35.5	8.8	4.4	2.1
500 to 999 acres	3.0	0.9	------	31.1	12.2	1.7	0.6	0.2
1,000 acres and over	1.4	0.3	100.0	18.9	2.7	0.4	0.1	(Z)
REGION III								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	4.1	4.5	------	------	------	0.3	2.9	9.3
10 to 49 acres	42.2	50.1	------	1.2	27.3	39.8	55.0	55.4
50 to 99 acres	22.6	23.0	------	4.8	22.2	28.4	22.9	20.8
100 to 219 acres	19.9	16.7	------	25.8	24.4	23.7	15.3	12.3
220 to 499 acres	7.5	4.4	18.6	31.0	19.1	6.7	3.4	2.0
500 to 999 acres	2.3	0.9	27.2	25.1	5.4	0.9	0.4	0.2
1,000 acres and over	1.4	0.4	54.2	12.1	1.6	0.2	0.1	(Z)
REGION IV								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	12.0	13.2	------	------	------	0.9	17.1	45.7
10 to 49 acres	52.2	57.3	0.3	1.5	31.8	70.5	70.3	41.9
50 to 99 acres	14.4	14.1	0.5	11.5	34.1	18.0	8.5	8.5
100 to 219 acres	11.8	9.7	3.7	47.8	26.7	8.7	3.5	3.3
220 to 499 acres	5.8	3.5	29.6	29.9	6.2	1.7	0.5	0.5
500 to 999 acres	2.3	1.3	34.5	7.0	1.0	0.2	0.1	0.1
1,000 acres and over	1.5	0.9	31.4	2.3	0.2	(Z)	(Z)	(Z)
REGION V								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	2.5	2.0	------	------	------	------	1.3	4.0
10 to 49 acres	19.8	33.4	------	------	9.8	25.0	37.2	40.6
50 to 99 acres	19.9	23.5	------	1.8	12.1	19.9	23.3	28.8
100 to 219 acres	29.9	26.7	2.3	23.7	34.3	33.4	28.3	22.1
220 to 499 acres	17.6	10.5	14.0	40.8	30.0	17.5	8.7	3.9
500 to 999 acres	6.3	2.5	33.0	19.0	9.3	3.2	0.9	0.6
1,000 acres and over	4.0	1.4	50.7	14.7	4.5	1.0	0.3	(Z)
REGION VI								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	2.7	2.0	------	------	------	------	0.6	14.1
10 to 49 acres	20.7	34.7	------	0.6	7.0	40.7	59.4	56.4
50 to 99 acres	19.8	28.1	------	5.2	36.3	37.5	23.9	21.1
100 to 219 acres	24.7	25.7	3.0	50.5	47.9	19.4	14.3	7.5
220 to 499 acres	16.6	7.1	47.6	36.9	6.5	2.1	1.4	0.9
500 to 999 acres	8.4	1.7	32.7	4.5	2.0	0.3	0.3	------
1,000 acres and over	7.1	0.7	16.7	2.3	0.3	(Z)	0.1	------
REGION VII								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	1.2	0.2	------	------	------	------	0.1	1.2
10 to 49 acres	5.9	7.4	------	------	0.3	2.5	12.3	33.2
50 to 99 acres	13.4	17.3	------	0.6	2.3	15.0	33.9	34.5
100 to 219 acres	34.0	38.9	1.7	14.2	33.7	55.2	43.1	24.8
220 to 499 acres	28.6	27.0	28.9	48.4	52.2	24.3	9.7	5.6
500 to 999 acres	10.2	6.9	35.6	28.7	9.6	2.6	0.8	0.6
1,000 acres and over	5.7	2.3	33.8	8.1	1.9	0.4	0.1	0.1
REGION VIII								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	4.0	2.5	------	------	------	1.1	7.9	24.0
10 to 49 acres	31.9	30.2	------	1.1	21.5	59.9	79.4	70.3
50 to 99 acres	18.2	18.6	------	16.1	42.9	25.8	6.0	1.9
100 to 219 acres	23.1	24.9	13.1	55.8	28.4	10.9	5.3	1.9
220 to 499 acres	14.2	15.7	49.3	23.4	6.1	1.1	------	------
500 to 999 acres	5.4	5.3	23.7	2.3	0.9	1.1	1.3	1.9
1,000 acres and over	3.2	2.8	13.9	1.3	0.2	0.1	0.1	------
REGION IX								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	1.4	0.1	------	------	------	------	0.6	4.8
10 to 49 acres	1.8	2.0	------	------	1.7	7.6	13.6	33.3
50 to 99 acres	2.1	3.8	------	1.9	8.1	9.3	14.3	4.8
100 to 219 acres	12.7	27.2	2.2	36.7	31.4	47.7	40.2	23.8
220 to 499 acres	31.9	41.5	45.5	41.7	49.0	27.8	24.7	23.8
500 to 999 acres	28.1	19.6	37.8	16.9	7.7	6.3	5.8	9.5
1,000 acres and over	22.0	5.8	14.5	2.8	2.1	1.3	0.8	------
REGION X								
Number of farms, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 10 acres	7.1	2.6	------	------	------	1.8	20.7	76.3
10 to 49 acres	38.2	25.7	0.1	6.4	57.3	82.7	73.3	21.1
50 to 99 acres	16.3	17.1	1.4	40.2	30.0	7.6	2.2	2.6
100 to 219 acres	13.9	21.6	22.3	41.9	7.6	5.8	3.7	------
220 to 499 acres	9.6	17.1	37.6	8.7	2.7	1.1	------	------
500 to 999 acres	5.1	8.4	20.6	1.2	1.5	0.4	------	------
1,000 acres and over	9.8	7.5	18.0	1.6	0.9	0.6	0.1	------

Z 0.05 percent or less.

Cropland utilization.—Data in table 15, concerning the acres of cropland per farm and the percent of cropland used for various major crops indicate that: (*1*) A higher percentage of harvested cropland was devoted to cotton for the smaller than for the larger size-of-farm business groups; and (*2*) fewer alternative crops of a cash type are grown on the smaller farms than on the larger farms. These indications suggest that the smaller size-of-business farms in all regions are more dependent on cotton production than the larger farms.

Data from both tables 14 and 15 bring out the significant fact that, in all regions and for all economic classes, a substantial proportion of cropland on cotton farms was idle in 1954. As 1954 was the first year since 1950 in which marketing quotas and acreage allotments were in effect for cotton, it is probable that a higher-than-usual acreage of cropland remained idle because, in one season, acceptable alternative uses had not been found.

In table 15 the average acreage of cotton harvested per farm is given for each economic class of farm in each region. The data of tables 17 and 18 afford some indication of the variation of the acreage of cotton from these averages for each economic class in each region. For example, Class II farms in Region I had an average of 74 acres of cotton. Data in table 17 reveal that 24 percent of these Class II farms harvested between 25 and 49 acres of cotton; 56 percent, between 50 and 99 acres; and 19 percent, between 100 and 199 acres.

TABLE 17.—PERCENT DISTRIBUTION OF FARMS REPORTING COTTON HARVESTED, BY ACRES HARVESTED, FOR ALL COMMERCIAL FARMS AND FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and economic class of farm	Percent distribution of farms reporting by acres of cotton harvested							
	Total	Under 5 acres	5 to 9 acres	10 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 199 acres	200 acres and over
TOTAL, 10 REGIONS								
All commercial farms	100.0	9.5	28.7	38.8	11.8	6.3	3.3	1.5
Cotton farms	100.0	6.0	27.0	42.2	12.5	6.8	3.7	1.8
Class I	100.0	------	------	0.2	1.3	13.1	42.5	42.9
II	100.0	------	------	1.5	19.5	45.3	24.9	8.8
III	100.0	(Z)	0.3	19.7	46.9	22.2	10.0	0.9
IV	100.0	0.1	4.6	64.3	22.6	7.2	1.2	(Z)
V	100.0	1.1	32.4	59.3	5.8	1.3	0.1	------
VI	100.0	22.5	57.1	19.2	1.0	0.2	(Z)	------
REGION I								
All commercial farms	100.0	16.5	37.0	37.1	7.3	1.6	0.4	0.1
Cotton farms	100.0	6.8	28.5	50.0	11.4	2.4	0.7	0.2
Class I	100.0	------	------	------	------	3.8	50.6	45.6
II	100.0	------	------	------	24.2	56.2	19.0	0.6
III	100.0	0.1	0.3	31.8	54.3	13.0	0.5	------
IV	100.0	(Z)	5.1	71.7	22.5	0.7	(Z)	------
V	100.0	1.2	30.4	65.9	2.5	(Z)	------	------
VI	100.0	23.1	58.7	18.1	0.1	------	------	------
REGION II								
All commercial farms	100.0	15.2	35.4	42.4	5.8	0.9	0.2	(Z)
Cotton farms	100.0	9.9	35.0	47.7	6.3	0.9	0.2	(Z)
Class I	100.0	------	------	------	------	------	52.2	47.8
II	100.0	------	------	------	12.2	60.0	27.2	0.6
III	100.0	------	------	12.2	65.3	22.2	0.3	------
IV	100.0	0.4	2.1	65.1	30.6	1.8	------	------
V	100.0	0.8	21.7	74.2	3.3	(Z)	------	------
VI	100.0	20.7	56.9	22.2	0.1	------	------	------
REGION III								
All commercial farms	100.0	12.8	38.8	41.4	5.6	1.0	0.3	0.1
Cotton farms	100.0	10.0	38.7	43.9	5.9	1.0	0.3	0.1
Class I	100.0	------	------	------	------	7.8	51.6	40.6
II	100.0	------	------	1.7	30.1	49.7	18.3	0.2
III	100.0	0.1	0.4	32.0	56.9	10.5	0.1	------
IV	100.0	0.1	5.3	79.3	15.1	0.3	------	------
V	100.0	1.3	40.5	57.1	1.1	(Z)	------	------
VI	100.0	27.0	60.9	12.0	0.1	(Z)	------	------
REGION IV								
All commercial farms	100.0	3.5	24.5	49.7	15.0	4.6	1.8	1.0
Cotton farms	100.0	2.9	24.0	50.7	15.1	4.5	1.7	1.0
Class I	100.0	------	------	------	0.3	9.5	46.8	43.3
II	100.0	------	------	0.7	22.7	63.1	13.2	0.3
III	100.0	------	0.1	21.1	67.9	10.5	0.3	------
IV	100.0	0.1	5.3	75.3	18.9	0.5	------	------
V	100.0	1.0	35.7	61.5	1.8	(Z)	------	------
VI	100.0	18.3	61.5	19.9	0.3	------	------	------
REGION V								
All commercial farms	100.0	8.9	25.0	40.9	16.4	6.4	1.6	0.7
Cotton farms	100.0	5.2	20.5	44.2	19.1	8.2	2.0	0.9
Class I	100.0	------	------	------	------	5.6	27.0	67.4
II	100.0	------	------	0.2	8.9	45.6	37.3	8.0
III	100.0	------	0.3	5.9	40.7	43.7	9.0	0.3
IV	100.0	0.1	0.7	34.4	45.2	18.6	1.0	------
V	100.0	0.3	7.5	65.5	23.8	2.8	------	------
VI	100.0	12.4	43.8	41.4	2.4	0.1	------	------

Region and economic class of farm	Percent distribution of farms reporting by acres of cotton harvested							
	Total	Under 5 acres	5 to 9 acres	10 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 199 acres	200 acres and over
REGION VI								
All commercial farms	100.0	6.0	20.4	33.9	24.2	11.5	3.4	0.6
Cotton farms	100.0	3.6	16.6	35.0	27.3	12.9	3.8	0.8
Class I	100.0	------	------	------	------	3.0	64.3	32.7
II	100.0	------	------	------	6.0	68.6	23.9	1.5
III	100.0	------	------	9.6	63.6	26.6	0.2	------
IV	100.0	0.3	7.9	54.7	36.1	1.0	------	------
V	100.0	0.8	33.1	58.9	6.9	0.3	------	------
VI	100.0	24.9	50.7	23.5	0.9	------	------	------
REGION VII								
All commercial farms	100.0	1.2	4.9	22.3	28.8	26.7	12.5	3.6
Cotton farms	100.0	0.3	2.2	16.6	28.9	31.5	15.8	4.7
Class I	100.0	------	------	------	0.1	5.6	35.8	58.5
II	100.0	------	------	(Z)	4.3	24.5	46.6	24.6
III	100.0	------	------	1.0	10.8	49.5	35.8	2.9
IV	100.0	------	0.1	7.1	40.2	44.7	7.7	0.3
V	100.0	(Z)	1.5	32.9	47.0	17.3	1.2	------
VI	100.0	2.8	17.5	56.3	19.1	4.1	0.2	------
REGION VIII								
All commercial farms	100.0	2.7	11.4	23.3	19.6	21.7	13.2	8.1
Cotton farms	100.0	1.9	11.9	22.6	19.4	22.2	13.9	8.2
Class I	100.0	------	------	------	------	13.1	45.2	41.6
II	100.0	------	------	1.1	20.7	54.3	21.6	2.3
III	100.0	------	------	26.7	45.2	22.8	3.2	2.2
IV	100.0	------	12.6	57.1	23.6	6.1	0.5	------
V	100.0	4.0	50.9	39.0	2.1	4.0	------	------
VI	100.0	25.9	48.1	22.2	3.7	------	------	------
REGION IX								
All commercial farms	100.0	0.4	1.8	7.5	13.1	28.7	30.4	18.1
Cotton farms	100.0	0.1	0.6	3.0	10.1	29.8	35.0	21.3
Class I	100.0	------	------	------	0.3	5.8	45.6	48.4
II	100.0	------	------	0.1	7.1	40.5	35.3	17.1
III	100.0	------	------	3.0	14.7	39.6	38.3	4.4
IV	100.0	------	1.4	10.8	26.6	47.9	13.2	0.1
V	100.0	1.3	6.5	19.6	41.8	21.1	9.7	------
VI	100.0	9.5	23.8	57.1	4.8	4.8	------	------
REGION X								
All commercial farms	100.0	3.0	9.3	26.0	20.7	17.1	12.7	11.2
Cotton farms	100.0	1.9	7.5	23.4	21.8	18.8	14.1	12.6
Class I	100.0	------	------	0.6	3.8	26.3	36.3	33.0
II	100.0	------	------	9.3	56.8	32.7	1.2	0.1
III	100.0	------	2.9	66.2	29.3	1.3	0.3	------
IV	100.0	1.9	24.6	68.6	4.2	0.7	------	------
V	100.0	14.2	60.7	22.9	2.2	------	------	------
VI	100.0	52.6	42.1	5.3	------	------	------	------

Z 0.05 percent or less.

TABLE 18.—PERCENT DISTRIBUTION OF COTTON FARMS BY ACRES OF COTTON HARVESTED, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and economic class of farm	Percent distribution of farms reporting by acres of cotton harvested							
	Total	Under 5 acres	5 to 9 acres	10 to 24 acres	25 to 49 acres	50 to 99 acres	100 to 199 acres	200 acres and over
TOTAL, 10 REGIONS								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	3.0	—	—	(Z)	0.3	5.8	34.1	70.8
II	5.0	—	—	0.2	7.7	33.2	33.3	24.3
III	9.0	(Z)	0.1	4.2	33.7	29.6	24.4	4.5
IV	22.2	0.3	3.8	33.8	40.0	23.8	6.9	0.4
V	35.7	6.6	42.9	50.3	16.3	7.0	1.2	—
VI	25.1	93.1	53.2	11.5	2.0	0.6	0.1	—
REGION I								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	0.5	—	—	—	—	0.8	36.1	94.2
II	2.2	—	—	—	4.6	50.0	58.5	5.8
III	7.7	0.1	0.1	4.9	36.4	41.4	5.2	—
IV	25.9	0.1	4.6	37.2	50.9	7.4	0.2	—
V	36.3	6.7	38.8	47.9	7.9	0.4	—	—
VI	27.5	93.1	56.5	10.0	0.2	—	—	—
REGION II								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	0.1	—	—	—	—	—	19.0	91.7
II	0.4	—	—	—	0.9	29.6	77.8	8.3
III	1.9	—	—	0.5	19.3	45.5	3.2	—
IV	11.9	0.5	0.7	16.3	58.2	23.6	—	—
V	39.8	3.3	24.7	61.9	20.8	1.4	—	—
VI	45.9	96.2	74.6	21.3	0.8	—	—	—
REGION III								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	0.3	—	—	—	—	2.2	43.8	98.0
II	1.0	—	—	(Z)	5.0	48.7	54.8	2.0
III	4.0	(Z)	(Z)	2.9	38.6	42.4	1.4	—
IV	19.1	0.1	2.6	34.5	48.7	5.6	—	—
V	40.8	5.4	42.6	53.1	7.4	0.2	—	—
VI	34.8	94.5	54.8	9.5	0.3	0.9	—	—
REGION IV								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	2.3	—	—	—	0.1	4.9	62.7	98.8
II	4.7	—	—	0.1	7.0	64.6	35.3	1.2
III	11.8	—	0.1	4.9	52.9	27.3	2.0	—
IV	28.0	0.5	6.2	41.5	35.0	3.0	—	—
V	39.8	13.8	59.1	48.2	4.9	0.2	—	—
VI	13.5	85.7	34.6	5.3	0.2	—	—	—
REGION V								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	1.0	—	—	—	—	0.7	13.3	74.7
II	2.5	—	—	(Z)	1.1	13.8	47.3	22.7
III	6.8	—	0.1	0.9	14.5	36.5	31.4	2.6
IV	16.5	0.4	0.6	12.9	39.0	37.5	8.0	—
V	32.3	2.2	11.8	47.9	40.2	11.3	—	—
VI	40.9	97.4	87.5	38.3	5.2	0.2	—	—
REGION VI								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	2.1	—	—	—	0.2	—	36.2	82.1
II	9.7	—	—	—	2.1	51.4	62.1	17.9
III	22.2	—	—	6.1	51.8	45.7	1.7	—
IV	30.0	1.7	14.3	46.8	39.7	2.4	—	—
V	22.7	5.3	45.1	38.2	5.7	0.5	—	—
VI	13.3	93.0	40.6	8.9	0.5	—	—	—
REGION VII								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	2.7	—	—	—	(Z)	0.5	6.0	33.1
II	9.9	—	—	(Z)	1.5	7.7	29.2	51.9
III	21.1	—	—	1.2	7.9	33.0	47.8	13.3
IV	30.7	—	1.1	13.2	42.7	43.6	14.9	1.7
V	25.3	3.7	17.1	50.3	41.1	13.9	2.0	—
VI	10.4	96.3	81.8	35.3	6.8	1.3	0.1	—
REGION VIII								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	17.2	—	—	—	—	10.2	56.1	87.4
II	24.7	—	—	1.3	26.2	60.4	38.3	6.9
III	21.6	—	—	25.5	50.3	22.1	4.9	5.7
IV	17.2	—	18.3	43.5	20.9	4.8	0.7	—
V	14.3	30.0	61.1	24.7	1.6	2.5	—	—
VI	5.1	70.0	20.6	5.0	1.0	—	—	—
REGION IX								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	28.6	—	—	—	0.7	5.6	37.3	65.0
II	39.6	—	—	1.1	27.8	53.7	40.0	31.7
III	16.0	—	—	15.8	23.4	21.2	17.5	3.3
IV	9.8	—	21.0	35.3	25.9	15.8	3.7	(Z)
V	5.3	50.0	52.6	34.2	21.8	3.7	1.5	—
VI	0.7	50.0	26.4	13.6	0.3	0.1	—	—
REGION X								
Cotton farms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Class I	38.0	—	—	0.9	6.6	53.3	97.4	99.9
II	25.9	—	—	10.3	67.5	45.0	2.1	0.1
III	17.2	—	6.7	48.5	23.1	1.2	0.5	—
IV	11.7	11.7	38.3	34.4	2.2	0.5	—	—
V	5.7	43.2	46.0	5.6	0.6	—	—	—
VI	1.6	45.1	8.9	0.3	—	—	—	—

Z 0.05 percent or less.

Table 18 shows, for each region, the distribution of farms having various sizes of cotton enterprises for each economic class. Somewhat more general data concerning the geographic distribution of cotton farms by size of the cotton enterprise are provided by the dot maps of figures 6, 7, 8, and 9.

The relative importance of cropland, of cotton and of other major crops, to the incomes of cotton farmers is further indicated by data in table 19. This table shows percentage distributions for each economic class of farm in each region, for total farm sales by the crop or livestock enterprise source.

Crops account for about 90 percent of the total sales for each economic class in each region except for Class I farms in Region II. For Class I farms in this region crops account for 76 percent of total sales. Cotton provides about 75 percent of the total sales for most economic classes and regions. In Region I, cotton sales account for around 70 percent of the total sales on farms in Classes I, II, and III, and on Class I farms in Region II cotton accounts for only 60 percent of total sales. Both tobacco and peanuts are important sources of farm income on many cotton farms of Region I. Livestock and livestock products are an unusually important source of income on Class I cotton farms in Region II.

As indicated by data in table 19, cotton sales account for a larger percentage of total sales on the smaller than on the larger size-of-business groups of farms.

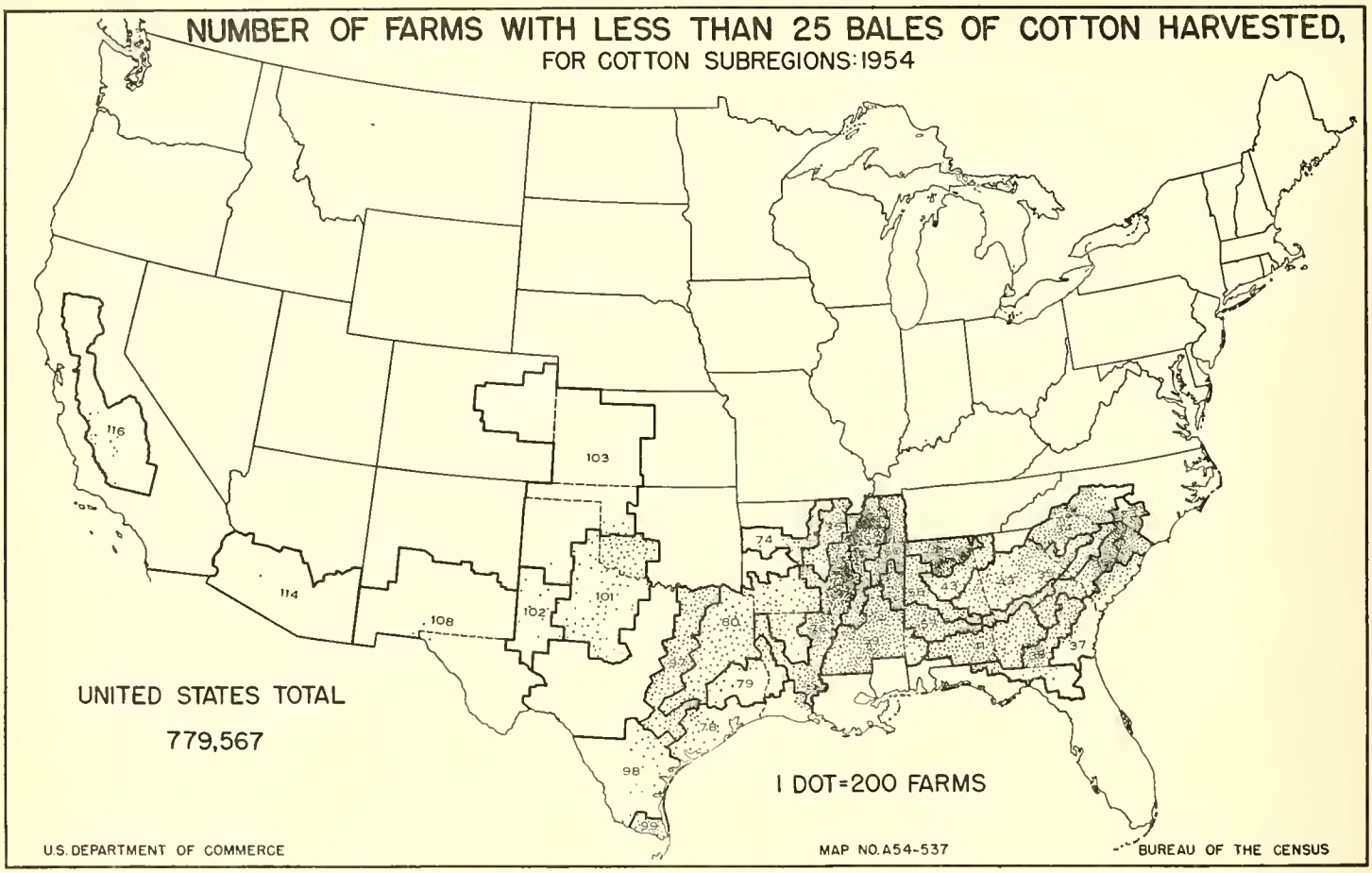

FIGURE 6.

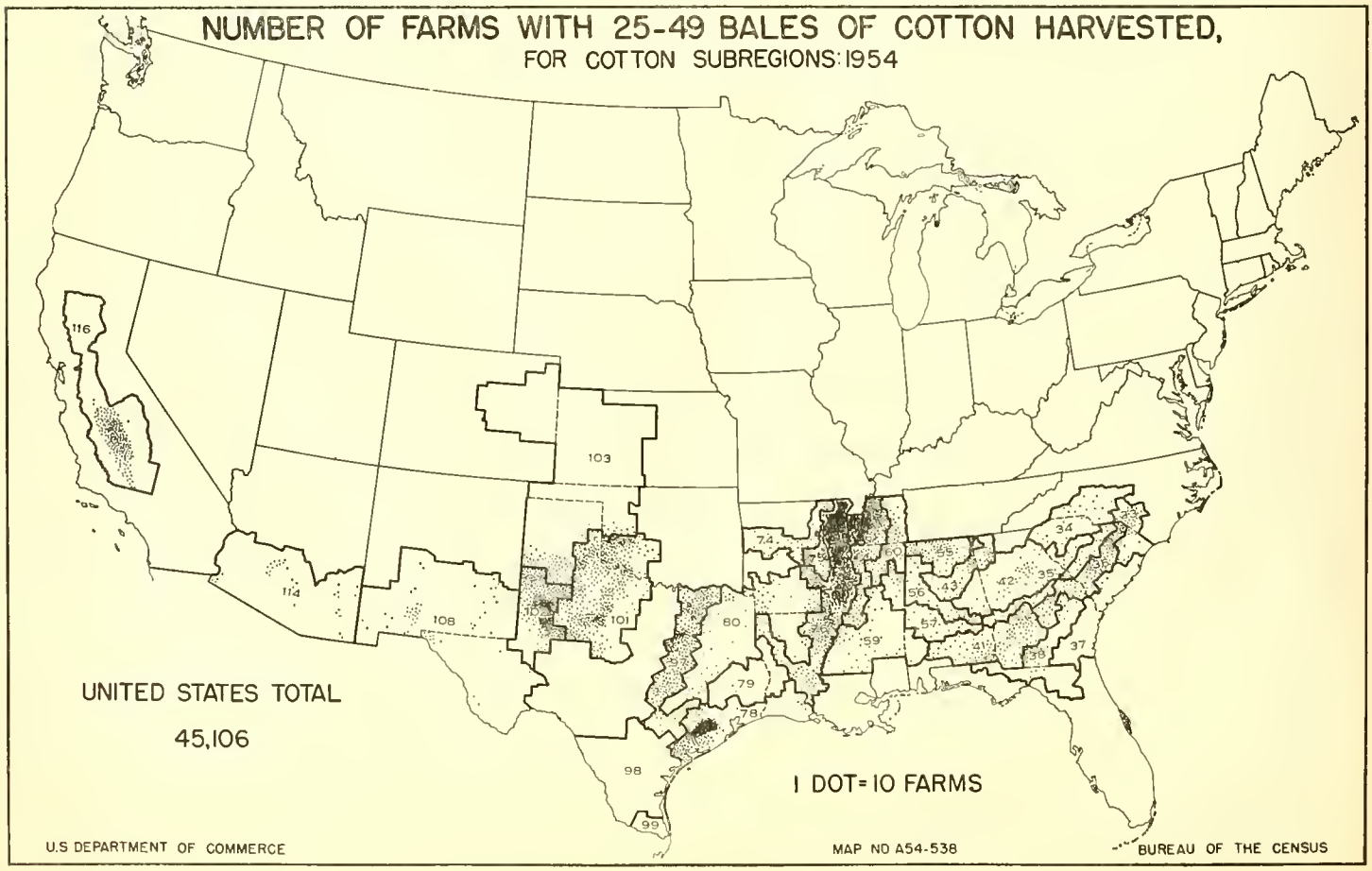

FIGURE 7.

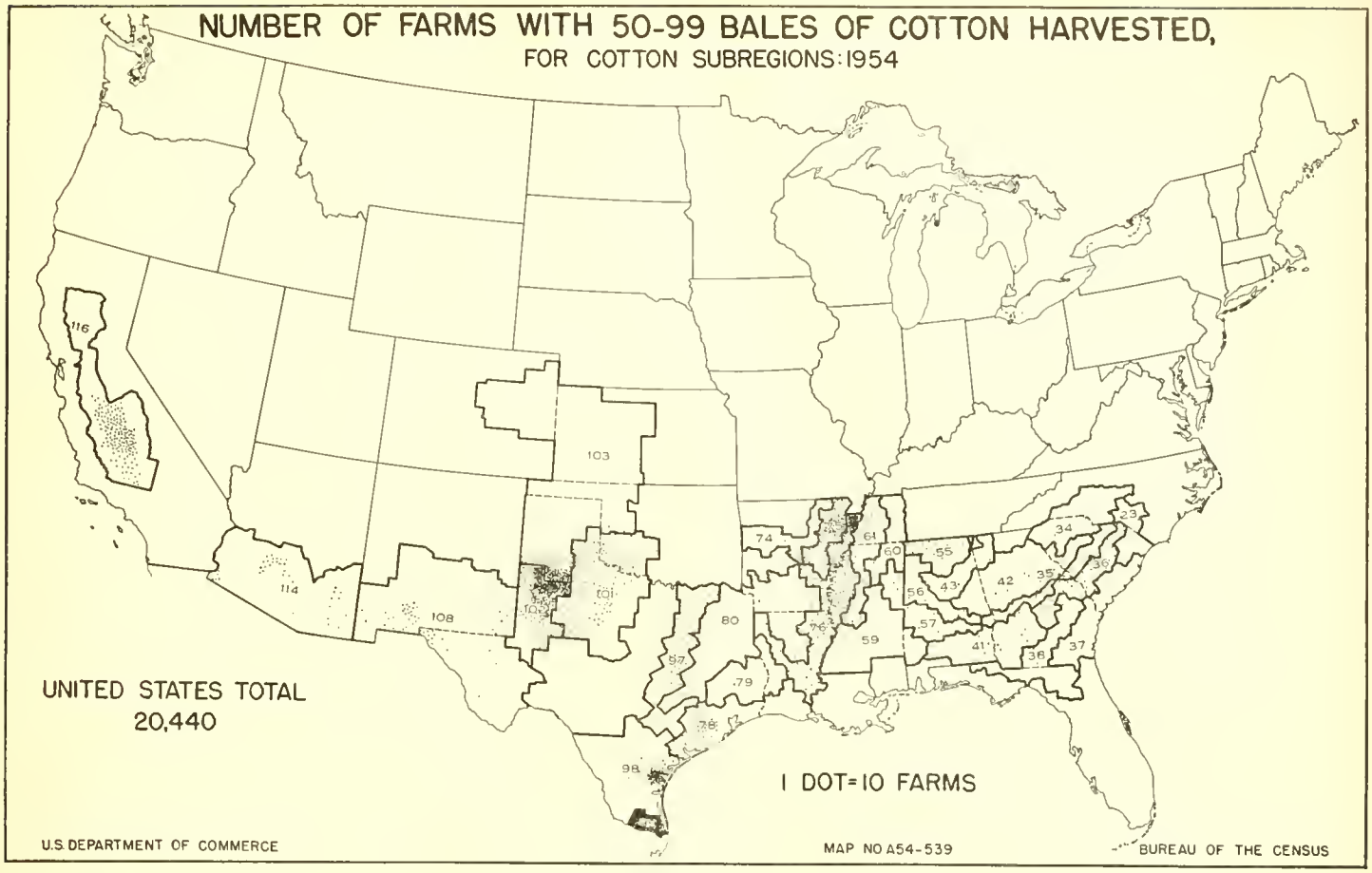

FIGURE 8.

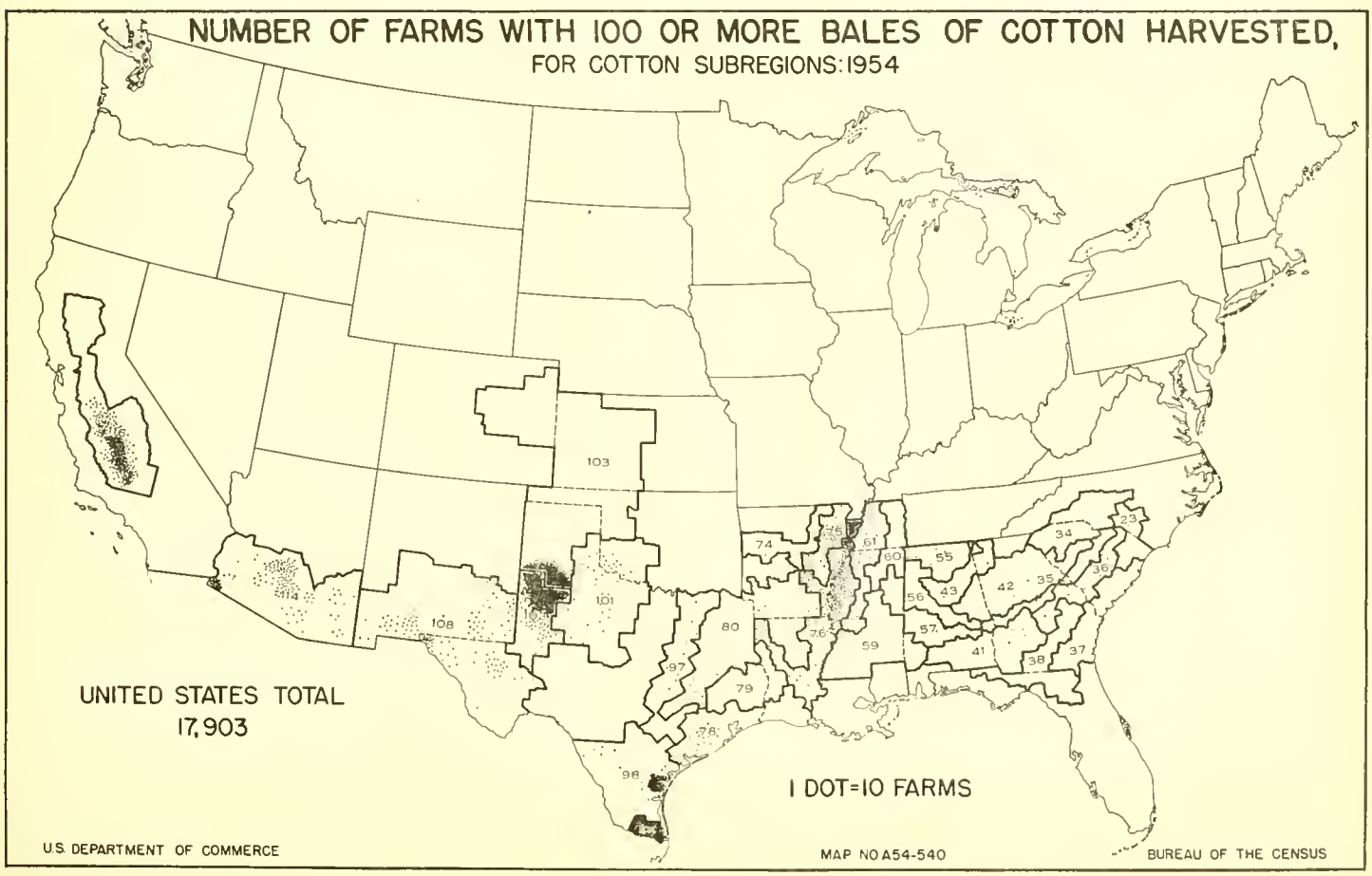

FIGURE 9.

TABLE 19.—DISTRIBUTION OF FARM SALES BY SOURCE, FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and item	All classes		Economic class of farm					
			I	II	III	IV	V	VI
	Dollars	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
REGION I								
Gross sales	158,390,782	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	146,702,510	92.6	89.5	88.2	92.5	94.0	93.4	94.4
Cotton	116,223,089	73.4	71.0	68.5	69.8	73.4	76.6	81.4
Corn	3,239,284	2.0	2.0	2.2	2.1	2.3	1.9	1.2
Tobacco	11,752,720	7.4	2.7	3.5	10.4	9.6	6.4	4.7
Peanuts	9,221,847	5.8	2.4	5.8	6.9	6.4	5.9	4.1
Oats	1,540,720	1.0	5.3	2.7	0.7	0.3	0.1	0.3
All other crops	4,724,850	3.0	6.1	5.5	2.6	2.0	2.5	2.7
All livestock and livestock products	11,095,020	7.0	9.4	11.2	7.1	5.8	6.4	5.3
Cattle and calves	3,240,704	2.0	5.3	4.8	2.1	1.2	1.1	1.1
Hogs and pigs	7,051,278	4.6	2.9	5.3	4.7	4.4	5.0	3.8
Poultry and poultry products	528,129	0.3	0.4	0.6	0.3	0.2	0.3	0.4
Dairy products	218,928	0.1	0.7	0.5	(Z)	(Z)	(Z)	(Z)
All other livestock and livestock products	55,981	(Z)	0.1	(Z)	(Z)	(Z)	(Z)	(Z)
Forest products	593,252	0.4	1.1	0.6	0.4	0.2	0.2	0.3
REGION II								
Gross sales	66,675,670	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	62,110,765	93.1	76.4	88.1	88.3	93.1	94.4	94.7
Cotton	55,969,596	83.9	60.7	73.5	73.3	83.0	86.1	88.2
Corn	1,064,273	1.6	1.0	1.4	1.7	1.8	1.8	1.0
Wheat	1,160,569	1.7	4.8	4.0	4.1	2.1	1.3	0.7
Oats	777,119	1.2	2.4	3.5	2.9	1.4	0.9	0.3
All other crops	3,139,208	4.7	7.5	5.6	6.4	4.8	4.3	4.5
All livestock and livestock products	4,059,875	6.1	17.8	10.9	10.6	6.2	5.0	4.7
Cattle and calves	1,691,067	2.5	11.8	7.0	5.6	2.3	1.8	1.6
Hogs and pigs	650,914	1.0	1.0	0.6	1.0	0.9	1.0	1.0
Poultry and poultry products	714,359	1.1	0.8	0.5	2.0	1.4	0.8	1.0
Dairy products	954,332	1.4	4.1	2.7	2.0	1.5	1.3	1.0
All other livestock and livestock products	49,203	0.1	(Z)	0.1	(Z)	0.1	0.1	0.1
Forest products	505,030	0.8	5.8	1.0	1.1	0.8	0.6	0.6
REGION III								
Gross sales	366,693,693	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	336,410,511	91.7	88.3	88.6	90.1	92.2	92.8	92.8
Cotton	314,401,906	85.7	76.6	79.0	83.6	86.4	88.1	88.4
Corn	10,070,290	2.7	1.9	2.4	3.2	3.4	2.7	1.7
Soybeans	4,548,729	1.2	6.9	5.2	1.6	0.6	0.2	0.1
All other crops	7,389,586	2.0	2.9	2.1	1.7	1.8	1.9	2.6
All livestock and livestock products	28,762,558	7.8	11.1	11.0	9.5	7.5	6.8	6.6
Cattle and calves	12,803,709	3.5	6.6	6.8	4.3	2.9	2.7	2.9
Hogs and pigs	7,713,805	2.1	1.6	2.2	3.0	2.4	1.7	1.5
Poultry and poultry products	2,203,220	0.6	0.2	0.8	0.6	0.5	0.7	0.8
Dairy products	5,568,587	1.5	2.5	1.1	1.3	1.6	1.5	1.2
All other livestock and livestock products	473,237	0.1	0.2	0.3	0.2	0.1	0.1	0.1
Forest products	1,520,624	0.4	0.6	0.4	0.4	0.3	0.4	0.6
REGION IV								
Gross sales	583,700,660	100.0	100.0	10.0	100.0	100.0	100.0	100.0
All crops	564,008,500	96.6	95.2	96.4	97.1	97.4	97.8	97.1
Cotton	506,672,777	86.8	79.4	83.0	88.0	92.3	94.6	94.5
Rice	4,878,592	0.8	2.4	0.3	0.2	0.2	(Z)	
Soybeans for beans	34,191,420	5.9	8.8	10.1	6.6	2.4	0.8	0.5
Oats	5,669,693	1.0	2.4	1.1	0.5	0.1	0.1	0.1
All other crops	12,596,018	2.2	2.3	1.9	1.8	2.4	2.3	2.1
All livestock and livestock products	19,282,879	3.3	4.7	3.5	2.9	2.5	2.1	2.8
Cattle and calves	11,697,608	2.0	3.5	2.2	1.4	1.1	1.0	1.5
Hogs and pigs	5,199,591	0.9	0.7	1.0	1.1	1.0	0.8	0.8
Poultry and poultry products	1,280,848	0.2	0.2	0.2	0.2	0.2	0.3	0.4
Dairy products	752,595	0.1	0.2	0.1	0.1	0.1	(Z)	0.1
All other livestock and livestock products	352,237	0.1	0.1	0.1	(Z)	(Z)	(Z)	0.1
Forest products	409,281	0.1	0.1	0.1	(Z)	0.1	(Z)	0.1
REGION V								
Gross sales	61,382,197	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	54,832,539	89.3	88.7	89.6	90.1	89.4	89.5	88.4
Cotton	50,934,495	83.0	81.1	80.5	83.8	84.6	85.1	81.2
Corn	689,711	1.1	0.6	1.9	1.1	1.4	1.1	0.9
Soybeans	1,042,412	1.7	1.6	4.6	2.8	1.1	0.4	0.3
Oats	303,065	0.5	1.2	0.9	0.5	0.2	(Z)	
All other crops	1,862,856	3.0	4.4	1.7	1.9	2.1	2.9	6.0
All livestock and livestock products	6,347,078	10.3	11.0	10.2	9.6	10.4	10.0	10.8
Cattle and calves	4,502,117	7.3	9.2	8.6	6.7	6.7	6.3	6.1
Hogs and pigs	983,470	1.6	0.9	0.6	1.9	2.1	1.9	2.3
Poultry and poultry products	511,068	0.8	0.4	0.7	0.7	0.8	1.1	1.7
Dairy products	310,511	0.5	0.6	0.3	0.2	0.6	0.6	0.6
All other livestock and livestock products	39,912	0.1	(Z)	(Z)	(Z)	0.1	0.1	0.2
Forest products	202,580	0.3	0.2	0.2	0.3	0.2	0.5	0.8

Z 0.05 percent or less.

TABLE 19.—DISTRIBUTION OF FARM SALES BY SOURCE, FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954—Continued

Region and item	All classes		Economic class of farm					
			I	II	III	IV	V	VI
	Dollars	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
REGION VI								
Gross sales	43,010,986	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	40,278,887	93.6	93.9	94.3	94.1	93.3	91.3	89.5
Cotton	36,116,319	84.0	78.2	85.3	86.9	83.2	81.9	85.6
Corn	983,971	2.3	2.0	2.2	2.8	2.2	1.6	1.1
Sweetpotatoes	767,033	1.8	(Z)	(Z)	1.1	5.3	4.5	1.7
Sorghum	1,548,856	3.6	8.8	6.0	1.7	0.7	0.4	0.1
All other crops	862,708	2.0	1.9	0.7	1.6	1.9	2.9	1.0
All livestock and livestock products	2,724,399	6.3	6.1	5.7	5.8	6.6	8.7	10.5
Cattle and calves	1,593,951	3.7	5.6	3.9	2.7	3.0	4.6	4.2
Hogs and pigs	301,478	0.7	0.2	0.5	0.8	0.9	1.1	1.7
Poultry and poultry products	770,397	1.8	0.2	1.2	2.1	2.6	2.8	4.6
Dairy products	35,185	0.1	(Z)	(Z)	0.1	0.1	0.2	
All other livestock and livestock products	23,388	0.1	0.1	0.1	0.1	(Z)	0.1	0.1
Forest products	7,700	(Z)		(Z)	(Z)	(Z)	(Z)	
REGION VII								
Gross sales	268,194,743	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	246,045,470	91.7	96.3	92.7	90.7	88.6	86.7	87.4
Cotton	201,863,264	75.3	71.4	76.0	76.5	76.5	76.8	80.0
Corn	6,551,292	2.4	0.8	1.8	3.3	3.8	3.4	2.2
Sorghum	23,840,124	8.9	18.8	9.8	5.5	3.3	2.0	0.6
All other crops	13,790,790	5.1	5.3	5.1	5.3	5.0	4.5	4.5
All livestock and livestock products	22,117,398	8.2	3.7	7.3	9.3	11.3	13.3	12.6
Cattle and calves	14,418,639	5.4	3.1	5.3	6.3	6.4	7.1	5.9
Hogs and pigs	2,516,156	0.9	0.2	0.7	1.2	1.4	1.6	1.6
Poultry and poultry products	3,359,847	1.3	0.1	0.5	1.2	2.4	3.7	4.4
Dairy products	1,270,045	0.5	0.1	0.5	0.4	0.9	0.7	0.5
All other livestock and livestock products	552,711	0.2	0.1	0.3	0.3	0.2	0.2	0.1
Forest products	31,875	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
REGION VIII								
Gross sales	89,657,922	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	87,118,133	97.2	96.7	98.0	97.5	97.7	97.9	99.1
Cotton	72,866,378	81.3	79.4	83.7	84.0	85.3	87.0	93.7
Sorghum	3,992,971	4.5	5.2	4.0	2.4	2.0	0.7	
All other crops	10,258,784	11.4	12.1	10.2	11.0	10.4	10.3	5.4
All livestock and livestock products	2,536,589	2.8	3.3	2.0	2.5	2.3	2.1	0.9
Cattle and calves	1,590,915	1.7	2.2	1.0	1.6	0.6	0.9	0.5
Hogs and pigs	251,426	0.3	0.3	0.3	0.3	0.4	0.5	0.1
Poultry and poultry products	171,290	0.2	(Z)	0.3	0.5	1.1	0.6	0.3
Dairy products	518,087	0.6	0.8	0.4	0.1	0.2		
All other livestock and livestock products	1,871	(Z)	(Z)	(Z)	(Z)		(Z)	
Forest products	3,200	(Z)	(Z)					
REGION IX								
Gross sales	319,545,051	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	310,726,070	97.2	97.7	97.1	95.4	92.0	89.5	85.5
Cotton	251,809,122	78.8	77.7	80.5	81.7	79.6	79.5	80.1
Sorghum	51,014,670	16.0	17.2	14.9	11.3	9.2	6.4	1.7
Wheat	4,929,607	1.5	1.8	1.0	1.3	2.3	2.2	3.5
All other crops	2,972,671	0.9	1.0	0.8	1.0	0.8	1.4	0.2
All livestock and livestock products	8,818,681	2.8	2.3	2.9	4.6	8.0	10.5	14.5
Cattle and calves	4,924,031	1.5	1.5	1.4	2.4	3.9	4.4	5.1
Hogs and pigs	1,281,393	0.4	0.3	0.6	0.5	0.6	0.8	
Poultry and poultry products	1,124,217	0.4	0.2	0.5	1.1	2.0	2.7	5.8
Dairy products	936,319	0.3	0.2	0.4	0.5	1.5	2.6	3.7
All other livestock and livestock products	552,721	0.2	0.2	0.1	0.1	(Z)	(Z)	
Forest products	300	(Z)				(Z)		
REGION X								
Gross sales	567,765,189	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All crops	543,091,872	95.6	95.8	95.0	94.1	94.3	97.7	99.3
Cotton	433,009,827	76.3	75.5	80.7	83.1	85.5	93.3	98.6
Barley	33,798,494	6.0	6.6	1.6	1.2	0.4	0.4	
Rice	3,341,928	0.6	0.7	0.2				
Alfalfa and mixture	23,715,254	4.2	4.1	5.9	3.9	1.4	1.6	0.2
Sugar beets	4,081,571	0.7	0.8	(Z)				
Sorghum	7,941,113	1.4	1.4	1.5	0.6	0.3	0.8	
Vegetables	8,609,591	1.5	1.6	0.7	0.5	0.7	0.2	
Fruits and nuts	6,040,556	1.1	0.8	2.3	3.2	5.0	1.4	
All other crops	22,553,538	4.0	4.3	2.2	1.4	0.9	0.1	0.6
All livestock and livestock products	24,660,312	4.3	4.2	5.0	5.9	5.6	2.3	0.7
Cattle and calves	16,827,061	3.0	3.1	2.4	2.2	2.3	1.0	
Poultry and poultry products	349,059	0.1	(Z)	0.2	0.6	0.3	0.7	0.2
Dairy products	5,144,906	0.9	0.7	2.1	2.5	1.7	0.2	
All other livestock and livestock products	2,348,286	0.4	0.4	0.4	0.7	1.2	0.4	0.5
Forest products	13,005	(Z)	(Z)		(Z)	0.2		

Z 0.05 percent or less.

Pasture and Woodland

Examination of the distribution of gross sales by source reveals that for most economic classes of farms and for most regions, pasture and woodland resources on cotton farms do not contribute substantially to cash farm income. The data in tables 14 and 15, however, show that, especially in some regions, pasture and woodland resources comprise, from the standpoint of acreage, a substantial part of the land resources on cotton farms.

In appraising the use of pasture resources on farms it is relevant to examine the data concerning the kinds and numbers of livestock found on different economic classes of cotton farms in the different regions. Information of this type is given in table 20.

In general, only the larger size-of-business groups of farms in each region have livestock enterprises of a commercial size and type. The beef-cattle enterprise appears to be the most common, but hogs are important in a few regions.

TABLE 20.—AVERAGE NUMBER PER FARM REPORTING AND PERCENT OF FARMS REPORTING SPECIFIED CLASSES OF LIVESTOCK, FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Horses and mules:							
Percent of farms reporting	61.8	80.1	61.8	62.1	58.2	58.5	69.3
Average number per farm reporting	2	10	5	3	2	2	1
All cattle and calves:							
Percent of farms reporting	58.3	87.8	81.1	68.3	58.3	56.4	55.6
Average number per farm reporting	7	99	40	13	7	5	3
Milk cows:							
Percent of farms reporting	45.1	41.1	49.4	52.0	46.1	44.8	42.6
Average number per farm reporting	2	7	3	2	2	2	2
Hogs and pigs:							
Percent of farms reporting	72.5	65.9	78.2	80.2	74.6	72.4	68.1
Average number per farm reporting	12	74	38	21	14	9	6
Chickens 4 months old and over:							
Percent of farms reporting	78.6	44.9	71.7	80.9	79.6	78.0	79.0
Average number per farm reporting	25	125	61	35	25	23	20
Sales of livestock and livestock products as a percent of gross farm sales	7.0	9.4	11.2	7.1	5.8	6.4	5.3
REGION II							
Horses and mules:							
Percent of farms reporting	58.9	95.7	60.6	60.4	52.6	54.9	63.9
Average number per farm reporting	2	13	5	3	2	2	2
All cattle and calves:							
Percent of farms reporting	69.4	95.7	95.0	77.4	72.9	70.2	67.3
Average number per farm reporting	5	213	53	24	8	5	3
Milk cows:							
Percent of farms reporting	62.8	39.1	55.6	56.9	64.2	63.8	61.9
Average number per farm reporting	2	24	6	4	3	2	2
Hogs and pigs:							
Percent of farms reporting	72.1	78.3	77.8	68.5	73.0	73.7	70.6
Average number per farm reporting	4	30	12	7	5	4	3
Chickens 4 months old and over:							
Percent of farms reporting	75.5	60.9	66.1	64.0	75.0	75.9	75.9
Average number per farm reporting	29	249	72	47	42	29	24
Sales of livestock and livestock products as a percent of gross farm sales	6.1	17.8	10.9	10.6	6.2	5.0	4.7
REGION III							
Horses and mules:							
Percent of farms reporting	56.7	73.7	58.4	49.5	47.5	52.6	67.1
Average number per farm reporting	2	10	5	3	3	2	2
All cattle and calves:							
Percent of farms reporting	73.1	79.2	84.2	81.5	75.2	71.8	72.1
Average number per farm reporting	9	168	60	20	10	7	5
Milk cows:							
Percent of farms reporting	62.4	40.0	54.6	67.0	65.4	62.4	60.7
Average number per farm reporting	3	14	5	4	3	3	2
Hogs and pigs:							
Percent of farms reporting	68.1	62.3	67.3	72.0	71.3	68.4	65.5
Average number per farm reporting	5	44	20	12	7	5	3
Chickens 4 months old and over:							
Percent of farms reporting	81.4	50.3	71.1	84.0	84.3	80.9	80.5
Average number per farm reporting	30	77	70	46	35	29	24
Sales of livestock and livestock products as a percent of gross farm sales	7.8	11.1	11.0	9.5	7.5	6.8	6.6

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION IV							
Horses and mules:							
Percent of farms reporting	28.2	57.5	30.5	25.5	27.9	25.8	32.3
Average number per farm reporting	3	7	4	2	2	2	2
All cattle and calves:							
Percent of farms reporting	46.4	66.8	63.0	56.8	50.5	39.5	39.9
Average number per farm reporting	11	112	25	10	7	5	5
Milk cows:							
Percent of farms reporting	37.7	32.2	43.1	46.8	42.7	33.1	31.7
Average number per farm reporting	2	5	2	2	2	2	2
Hogs and pigs:							
Percent of farms reporting	48.8	43.8	48.9	50.8	53.4	47.7	41.9
Average number per farm reporting	6	35	13	9	6	4	3
Chickens 4 months old and over:							
Percent of farms reporting	70.2	51.1	72.0	73.2	75.0	68.9	64.1
Average number per farm reporting	29	60	43	37	29	24	23
Sales of livestock and livestock products as a percent of gross farm sales	3.3	4.7	3.5	2.9	2.5	2.1	2.8
REGION V							
Horses and mules:							
Percent of farms reporting	60.2	66.0	51.6	45.5	46.9	52.4	74.6
Average number per farm reporting	2	8	3	2	2	2	2
All cattle and calves:							
Percent of farms reporting	77.0	85.1	83.5	80.7	77.6	72.5	79.1
Average number per farm reporting	17	242	67	33	19	12	8
Milk cows:							
Percent of farms reporting	60.0	21.4	49.3	59.7	62.1	56.8	63.4
Average number per farm reporting	3	13	3	3	3	3	2
Hogs and pigs:							
Percent of farms reporting	60.6	36.7	44.4	54.2	61.7	59.4	63.8
Average number per farm reporting	6	34	10	10	8	5	4
Chickens 4 months old and over:							
Percent of farms reporting	83.3	25.1	66.8	79.0	83.6	83.5	86.2
Average number per farm reporting	32	38	51	42	39	31	28
Sales of livestock and livestock products as a percent of gross farm sales	10.3	11.0	10.2	9.6	10.4	10.0	10.8
REGION VI							
Horses and mules:							
Percent of farms reporting	44.8	42.9	36.2	28.2	40.3	58.9	64.8
Average number per farm reporting	3	5	2	2	3	3	3
All cattle and calves:							
Percent of farms reporting	81.3	76.2	81.0	81.4	85.0	82.4	72.3
Average number per farm reporting	16	106	38	16	10	10	8
Milk cows:							
Percent of farms reporting	62.0	38.1	53.0	59.3	69.3	66.6	52.6
Average number per farm reporting	3	3	3	3	2	3	2
Hogs and pigs:							
Percent of farms reporting	67.5	38.1	52.0	64.6	71.0	73.2	70.4
Average number per farm reporting	6	13	7	8	6	4	4
Chickens 4 months old and over:							
Percent of farms reporting	84.1	57.1	70.0	85.0	86.9	86.2	87.3
Average number per farm reporting	80	80	133	101	78	62	47
Sales of livestock and livestock products as a percent of gross farm sales	6.3	6.1	5.7	5.8	6.6	8.7	10.5

TABLE 20.—AVERAGE NUMBER PER FARM REPORTING AND PERCENT OF FARMS REPORTING SPECIFIED CLASSES OF LIVESTOCK, FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION VII							
Horses and mules:							
Percent of farms reporting	21.2	31.9	27.6	20.5	15.5	19.7	33.7
Average number per farm reporting	2	3	2	2	2	2	2
All cattle and calves:							
Percent of farms reporting	78.4	67.0	77.2	82.9	80.0	77.4	71.6
Average number per farm reporting	16	68	31	19	13	11	8
Milk cows:							
Percent of farms reporting	58.0	34.6	47.1	58.7	60.4	61.5	57.3
Average number per farm reporting	3	3	3	3	3	3	2
Hogs and pigs:							
Percent of farms reporting	42.4	24.3	34.2	41.5	43.7	44.8	46.7
Average number per farm reporting	6	18	11	8	6	5	4
Chickens 4 months old and over:							
Percent of farms reporting	74.9	39.2	60.8	73.6	78.3	79.5	79.3
Average number per farm reporting	67	64	71	70	71	66	47
Sales of livestock and livestock products as a percent of gross farm sales	8.2	3.7	7.3	9.3	11.3	13.3	12.6
REGION VIII							
Horses and mules:							
Percent of farms reporting	15.6	18.3	12.1	13.2	11.6	22.0	29.6
Average number per farm reporting	2	3	2	1	1	2	2
All cattle and calves:							
Percent of farms reporting	47.9	53.0	57.1	54.0	32.5	37.0	42.6
Average number per farm reporting	24	77	17	12	6	5	4
Milk cows:							
Percent of farms reporting	34.5	31.7	42.7	41.2	23.2	27.1	35.2
Average number per farm reporting	4	10	3	3	2	2	2
Hogs and pigs:							
Percent of farms reporting	20.2	15.1	22.6	24.1	16.5	21.2	18.5
Average number per farm reporting	11	37	11	6	5	4	3
Chickens 4 months old and over:							
Percent of farms reporting	37.6	24.3	41.4	40.4	39.6	37.0	48.1
Average number per farm reporting	46	47	58	45	47	31	21
Sales of livestock and livestock products as a percent of gross farm sales	2.8	3.3	2.0	2.5	2.3	2.1	.9

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION IX							
Horses and mules:							
Percent of farms reporting	17.7	23.0	15.7	14.1	14.0	18.9	33.3
Average number per farm reporting	2	2	2	2	2	2	2
All cattle and calves:							
Percent of farms reporting	66.2	64.8	66.2	68.7	68.2	61.1	71.4
Average number per farm reporting	15	25	12	11	12	11	8
Milk cows:							
Percent of farms reporting	52.6	47.3	54.7	54.8	55.1	52.9	71.4
Average number per farm reporting	3	3	3	3	3	3	2
Hogs and pigs:							
Percent of farms reporting	31.8	30.9	33.9	32.8	28.0	27.5	14.3
Average number per farm reporting	10	15	11	6	5	3	2
Chickens 4 months old and over:							
Percent of farms reporting	68.2	58.3	70.7	75.5	73.4	68.7	81.0
Average number per farm reporting	69	67	72	70	67	62	41
Sales of livestock and livestock products as a percent of gross farm sales	2.8	2.3	2.9	4.6	8.0	10.5	14.5
REGION X							
Horses and mules:							
Percent of farms reporting	23.6	34.7	21.5	16.1	11.4	12.0	7.9
Average number per farm reporting	3	3	2	2	2	1	2
All cattle and calves:							
Percent of farms reporting	50.4	48.6	59.0	51.3	43.7	42.3	21.1
Average number per farm reporting	49	107	21	13	10	3	2
Milk cows:							
Percent of farms reporting	33.8	27.4	43.2	39.1	30.7	27.5	21.1
Average number per farm reporting	7	13	6	4	3	1	1
Hogs and pigs:							
Percent of farms reporting	15.4	12.2	20.1	17.8	14.3	14.1	5.3
Average number per farm reporting	14	26	9	9	12	3	2
Chickens 4 months old and over:							
Percent of farms reporting	40.2	30.4	49.2	41.9	48.7	42.3	39.5
Average number per farm reporting	38	40	38	43	34	32	30
All sheep:							
Percent of farms reporting	6.9	8.2	8.3	5.1	5.1	2.2	2.6
Average number per farm reporting	184	368	45	19	10	2	32
Sales of livestock and livestock products as a percent of gross farm sales	4.3	4.2	5.0	5.9	5.6	2.3	.7

Section 5.—LABOR RESOURCES AND USE

For two chief reasons the characteristics and the utilization of labor on cotton farms are of special importance.

First, it represents the input of the human agent in cotton farming. Second, the extent to which labor is combined with other resources, in patterns that are economically and technically effective, determines the levels of income from farming that are available to the people on cotton farms.

This report provides several types of data on labor resources and use: (*1*) The age composition of the operators of cotton farms; (*2*) the days of off-farm work by operators of cotton farms; (*3*) the proportion of cotton farms for which off-farm income of the family exceeds the value of farm sales; (*4*) the man-equivalents of all labor and its percentage distributions by type of worker; (*5*) the distributions of expenditures for hired labor; and (*6*) acres of cropland and acres of cotton harvested per man-equivalent.

AGE OF OPERATOR

Information relating to the distribution of farm operators by age groups by economic class of farm, and data concerning the proportions of farms in each economic class that are operated by persons in each age group, are useful in analyzing the characteristics of the labor resource on cotton farms.

Data concerning the distribution of farm operators of each age group among economic classes of farms are found in table 21.

For most regions about 3 percent of all operators of cotton farm are under 25 years of age. In Regions I through V more than 7 and usually nearer 80 percent of farm operators under 25 years of age are found on farms in Economic Classes V and VI. These are farms that had gross sales of between $250 and $2,500 in 1954. It would seem reasonable to infer that a number of these young operators would be relatively receptive to opportunities for nonfarm work and/or to adjustments that would permit an increase in the size of their farm business.

In Regions I through V about one-eighth of all operators of cotton farms are between 25 and 35 years of age. Most of these also are on Class V and Class VI farms. They would appear to face problems of adjustment similar to those of operators under 25 years of age.

In Regions VI and VII about 40 and 35 percent, respectively, of operators under 25 years of age are found on Classes V and VI farms. Nearly one-third of the operators from 25 to 35 years old also operate Class V or VI farms.

For the remaining 3 regions small percentages of the younger age groups of farm operators are found on the 2 smallest size-of-business groups.

TABLE 21.—PERCENT DISTRIBUTION OF OPERATORS OF COTTON FARMS IN EACH AGE GROUP, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region and age of operator	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
All age groups	100.0	0.5	2.2	7.7	25.8	36.3	27.5
Under 25 years	100.0	----	0.9	7.3	18.4	42.6	30.8
25 to 34 years	100.0	0.2	2.4	7.4	26.8	37.4	25.8
35 to 44 years	100.0	0.5	2.4	9.5	30.5	36.7	20.4
45 to 54 years	100.0	0.5	2.3	8.8	27.9	36.5	24.0
55 to 64 years	100.0	0.6	1.9	5.8	21.6	37.3	32.8
65 years and over	100.0	0.7	1.8	4.2	16.1	30.9	46.3
REGION II							
All age groups	100.0	0.1	0.5	1.8	11.9	39.9	45.8
Under 25 years	100.0	----	----	----	9.7	37.7	52.6
25 to 34 years	100.0	----	0.6	1.6	11.4	44.7	41.7
35 to 44 years	100.0	0.1	0.4	2.4	15.9	46.8	34.4
45 to 54 years	100.0	0.1	0.5	2.4	14.3	43.8	38.9
55 to 64 years	100.0	0.1	0.6	1.1	8.6	34.6	55.0
65 years and over	100.0	(Z)	0.2	1.1	6.0	24.7	68.0
REGION III							
All age groups	100.0	0.3	1.0	4.0	19.1	40.6	35.0
Under 25 years	100.0	0.1	0.2	1.6	13.1	45.1	39.9
25 to 34 years	100.0	0.3	1.0	3.9	17.6	46.7	30.5
35 to 44 years	100.0	0.3	0.9	5.4	25.0	43.9	24.5
45 to 54 years	100.0	0.4	1.1	4.6	21.6	41.7	30.6
55 to 64 years	100.0	0.2	1.1	3.0	15.6	36.3	43.8
65 years and over	100.0	0.2	0.6	1.9	8.5	27.8	61.0
REGION IV							
All age groups	100.0	2.3	4.7	11.9	28.2	39.5	13.4
Under 25 years	100.0	0.5	2.2	6.3	19.5	50.9	20.6
25 to 34 years	100.0	2.2	5.1	11.0	25.5	43.6	12.6
35 to 44 years	100.0	3.1	6.1	13.8	31.6	36.4	9.0
45 to 54 years	100.0	2.3	4.8	13.8	31.4	36.7	11.0
55 to 64 years	100.0	2.1	3.6	10.4	26.7	40.4	16.8
65 years and over	100.0	2.0	2.8	7.2	19.5	42.5	26.0
REGION V							
All age groups	100.0	1.0	2.4	6.9	16.4	32.6	40.7
Under 25 years	100.0	----	1.0	2.1	17.7	34.4	44.8
25 to 34 years	100.0	2.4	2.0	9.8	21.4	37.0	27.4
35 to 44 years	100.0	1.4	3.0	9.5	21.8	35.9	28.4
45 to 54 years	100.0	0.7	2.7	7.1	17.8	34.8	36.9
55 to 64 years	100.0	0.8	2.2	4.8	12.3	29.3	50.6
65 years and over	100.0	0.2	1.6	4.2	7.7	24.0	62.3
REGION VI							
All age groups	100.0	2.1	9.7	22.2	30.0	22.7	13.3
Under 25 years	100.0	----	9.3	27.9	23.3	32.5	7.0
25 to 34 years	100.0	2.3	13.1	22.4	31.2	24.1	6.9
35 to 44 years	100.0	2.6	13.9	27.2	28.6	23.2	4.5
45 to 54 years	100.0	2.7	7.6	20.5	37.5	18.8	12.9
55 to 64 years	100.0	1.3	6.9	21.6	25.7	23.9	20.6
65 years and over	100.0	0.6	5.8	12.4	20.7	25.3	35.2
REGION VII							
All age groups	100.0	2.7	10.0	21.2	30.7	25.2	10.2
Under 25 years	100.0	1.7	6.8	22.1	34.5	24.7	10.2
25 to 34 years	100.0	3.2	11.4	26.6	30.0	22.8	6.0
35 to 44 years	100.0	3.2	12.5	24.4	31.7	22.0	6.2
45 to 54 years	100.0	3.0	10.7	21.1	33.2	23.7	8.3
55 to 64 years	100.0	2.1	7.7	17.5	28.7	30.2	13.8
65 years and over	100.0	1.4	5.2	14.6	25.5	29.6	23.7
REGION VIII							
All age groups	100.0	16.6	25.6	21.7	16.9	14.2	5.0
Under 25 years	100.0	42.5	1.9	----	37.0	9.3	9.3
25 to 34 years	100.0	20.5	29.8	18.3	18.3	11.8	1.3
35 to 44 years	100.0	23.0	29.5	16.2	12.6	12.6	6.1
45 to 54 years	100.0	17.7	26.2	19.8	16.8	15.0	4.5
55 to 64 years	100.0	8.6	25.3	29.8	16.3	16.3	3.7
65 years and over	100.0	7.9	13.1	29.0	23.5	15.2	11.3
REGION IX							
All age groups	100.0	28.5	39.6	16.1	9.8	5.3	0.7
Under 25 years	100.0	17.4	48.5	17.7	11.8	3.1	1.5
25 to 34 years	100.0	37.3	38.6	13.0	7.4	3.7	----
35 to 44 years	100.0	35.0	40.5	14.4	6.3	3.4	0.4
45 to 54 years	100.0	26.5	42.6	16.1	9.0	5.4	0.4
55 to 64 years	100.0	16.4	35.0	22.7	16.4	8.2	1.3
65 years and over	100.0	9.5	30.2	19.4	22.3	14.9	3.7
REGION X							
All age groups	100.0	37.6	26.1	17.2	11.7	5.8	1.6
Under 25 years	100.0	28.8	25.1	30.1	9.1	4.6	2.3
25 to 34 years	100.0	47.4	25.2	13.8	9.7	3.9	----
35 to 44 years	100.0	43.5	28.3	15.2	9.1	3.9	----
45 to 54 years	100.0	38.6	26.8	15.1	12.2	6.3	1.0
55 to 64 years	100.0	26.8	25.4	23.9	14.8	7.0	2.1
65 years and over	100.0	17.9	20.6	21.7	17.4	12.6	9.8

Z 0.05 percent or less.

The differences in the implications of these data for the 3 most western and 5 most eastern cotton-production regions seem significant.

For the 10 regions used in this report from 25 to 30 percent of farm operators are between the ages of 45 and 54. It seems reasonable to suppose that those in this age group would, in general, have attained most of their adjustments toward an efficient and productive farm business. In this perspective it is interesting to examine the distribution, among economic classes of farms, of operators in the 45-to-54 years of age group for the various regions.

In Regions I, II, III, and V from 61 to 83 percent of the operators in the age group 45 to 64 years are found on Class V and Class VI farms. From 0.6 percent to about 3 percent of operators in this age group are found on farms in Classes I and II in these regions.

Region IV, "The Mississippi Delta," has a substantially smaller proportion of farm operators in this age group in the two smallest size-of-business groups, and a much larger percentage are found on Classes I and II farms. The actual percentages here are 7 and 48 percent, respectively, for the 2 largest and the 2 smallest size-of-business groups.

For Regions VI and VII, just under one-third of the operators between 45 and 54 years of age are found on Classes V and VI farms, while 10 and 14 percent of the operators in this age group in these two regions have farms that fall in the 2 largest size-of-business groups.

In the three remaining regions strikingly larger percentages of operators in this age group are found on Classes I and II farms. Conversely very much smaller proportions are found on farms that fall in the two smallest size-of-business groups.

The picture with respect to the age composition of all operators of cotton farms and of the operators of farms in each of the economic classes is shown for each region in table 22. These data enable one to appraise, for each region, the proportionate age distribution of farm operators in various economic classes.

For example, in Region IV, 30 percent of the operators of Class IV farms are shown to be between 45 and 54 years of age. Operators in this age group account for 27 percent of all cotton-farm operators in the region. This age group is, therefore, somewhat more than proportionally represented among farms that fall in Economic Class IV.

The proportions of the smaller size-of-business groups of farms that are operated by persons in the older age groups is a statistic of some interest. For it frequently is, and has in this report been, assumed that future adjustments in resource use on cotton farms will significantly affect the number and characteristics of farms that are now in these economic classes.

It is interesting to observe that in Regions I through V from about 40 to 48 percent of Class VI farms have operators who are 55 years of age or older, and that in these same regions about 23 to 30 percent of the operators of Class V farms fall in this older age group. In each of these 5 regions, except Region IV, Classes V and VI farms account for from about 65 to more than 85 percent of all cotton farms. In Region IV these two smallest size-of-business groups comprise about 53 percent of all cotton farms.

The older group of operators account for substantially higher proportions of all operators of Classes V and VI cotton farms in the remaining regions. From the standpoint of the regions as a whole, however, these smaller size-of-business farms are of much less significance in these regions.

TABLE 22.—PERCENT DISTRIBUTION OF OPERATORS OF EACH ECONOMIC CLASS OF COTTON FARM, BY AGE, BY REGIONS: 1954

Region and age of operator	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	3.1	------	1.2	2.9	2.2	3.6	3.5
25 to 34 years	13.0	4.7	14.3	12.5	13.5	13.4	12.2
35 to 44 years	27.7	28.3	30.3	34.0	32.9	28.0	20.6
45 to 54 years	27.8	28.4	29.7	31.4	30.0	27.9	24.3
55 to 64 years	17.3	22.2	15.3	13.1	14.5	17.7	20.7
65 years and over	11.1	16.4	9.2	6.1	6.9	9.4	18.7
REGION II							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	2.2	------	------	------	1.8	2.1	2.6
25 to 34 years	9.9	------	13.3	8.5	9.4	11.1	9.0
35 to 44 years	25.3	27.3	23.9	33.3	33.8	29.6	19.0
45 to 54 years	27.2	27.3	27.2	36.2	32.5	30.0	23.0
55 to 64 years	21.2	40.9	29.5	13.0	15.3	18.4	25.3
65 years and over	14.2	4.5	6.1	9.0	7.2	8.8	21.1
REGION III							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	3.6	0.9	0.8	1.5	2.5	4.0	4.2
25 to 34 years	13.9	14.7	14.2	13.4	12.8	16.0	12.1
35 to 44 years	26.0	26.5	25.3	35.0	34.0	28.1	18.2
45 to 54 years	28.0	36.3	32.5	31.8	31.5	28.7	24.3
55 to 64 years	17.6	13.4	20.7	13.1	14.3	15.7	22.1
65 years and over	10.9	8.2	6.5	5.2	4.9	7.5	19.1
REGION IV							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	4.5	1.0	2.1	2.4	3.1	5.8	7.0
25 to 34 years	16.1	15.2	17.2	14.9	14.6	17.8	15.2
35 to 44 years	27.0	35.6	35.2	31.4	30.3	24.9	18.2
45 to 54 years	27.2	26.4	27.7	31.5	30.2	25.2	22.2
55 to 64 years	16.9	14.8	12.9	14.7	16.0	17.3	21.2
65 years and over	8.3	7.0	4.9	5.1	5.8	9.0	16.2
REGION V							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	2.2	------	1.0	0.7	2.4	2.3	2.5
25 to 34 years	8.4	20.7	7.1	12.1	11.0	9.5	5.7
35 to 44 years	21.5	31.7	26.9	29.9	28.5	23.7	15.0
45 to 54 years	31.8	24.5	35.4	33.0	34.3	34.0	28.7
55 to 64 years	24.5	20.7	22.1	17.3	18.3	22.0	30.4
65 years and over	11.6	2.4	7.5	7.0	5.5	8.5	17.7

Region and age of operator	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION VI							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	2.8	------	2.6	3.5	2.1	4.0	1.4
25 to 34 years	14.9	16.7	20.1	15.0	15.4	15.8	7.7
35 to 44 years	24.2	30.9	34.8	29.7	23.0	24.9	8.2
45 to 54 years	28.2	36.3	22.2	26.2	35.3	23.4	27.4
55 to 64 years	21.5	13.6	15.3	20.9	18.4	22.6	33.2
65 years and over	8.4	2.5	5.0	4.7	5.8	9.3	22.1
REGION VII							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	2.1	1.4	1.4	2.2	2.4	2.1	2.1
25 to 34 years	12.5	14.8	14.3	15.7	12.3	11.4	7.3
35 to 44 years	25.0	29.6	31.4	28.8	25.9	21.9	15.3
45 to 54 years	29.1	32.1	31.2	28.9	31.3	27.2	23.6
55 to 64 years	21.2	16.8	16.4	17.5	19.8	25.5	28.4
65 years and over	10.1	5.3	5.3	6.9	8.3	11.9	23.3
REGION VIII							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	1.2	2.8	0.1	------	2.4	0.7	2.0
25 to 34 years	15.3	18.8	17.7	12.9	16.5	12.7	4.0
35 to 44 years	22.9	31.8	26.4	17.1	17.1	20.4	28.0
45 to 54 years	28.6	30.6	29.2	26.2	28.5	30.2	26.0
55 to 64 years	21.4	11.0	21.2	29.5	20.7	24.6	16.0
65 years and over	10.6	5.0	5.4	14.3	14.8	11.4	24.0
REGION IX							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	4.7	2.9	5.8	5.2	5.7	2.8	10.5
25 to 34 years	20.9	27.4	20.3	16.9	16.0	14.7	------
35 to 44 years	28.9	35.4	29.4	25.8	18.5	18.7	15.8
45 to 54 years	26.7	24.8	28.6	26.6	24.7	27.3	15.8
55 to 64 years	13.2	7.6	11.6	18.7	22.2	20.5	26.3
65 years and over	5.6	1.9	4.3	6.8	12.9	16.0	31.6
REGION X							
All age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 25 years	1.9	1.4	1.8	3.3	1.5	1.5	2.8
25 to 34 years	17.0	21.5	16.4	13.6	14.1	11.2	------
35 to 44 years	28.9	33.6	31.2	25.5	22.4	19.2	------
45 to 54 years	26.9	27.6	27.6	23.5	28.0	28.9	16.7
55 to 64 years	16.1	11.5	15.7	22.4	20.3	19.2	22.2
65 years and over	9.2	4.4	7.3	11.7	13.7	20.0	58.3

OFF-FARM USE OF LABOR RESOURCES

Two types of data are available to indicate the extent to which operator and family labor resources on the various economic classes of cotton farms in the different regions are used in off-farm employment. These data are for operators of cotton farms classified by the days of off-farm work, and the percentage of farms for which off-farm income of the *family* exceeded the value of farm sales. The information relating to days of off-farm work is given in table 23. And those concerning the off-farm income of the family in relation to the value of farm sales are shown in table 24.

Questions frequently are raised as to whether the farm families on Classes V and VI farms represent, essentially, a welfare problem rather than an economic problem in the organization and use of resources.

Few of the data in this report illumine the question of whether most of the families on Classes V and VI cotton farms represent welfare rather than economic problems. Data concerning the age distribution of operators are only partly applicable. These data, however, do not indicate, for those regions where there are appreciable numbers of these small farms, that most of them are in the hands of the aged.

The data on off-farm work of operators, and on the proportion of farms for which off-farm income exceeds farm sales, suggest that most families on Classes V and VI cotton farms are primarily dependent upon farming for their incomes.

TABLE 23.—PERCENT DISTRIBUTION OF OPERATORS OF COTTON FARMS BY DAYS OF WORK OFF FARM, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and days worked off farm	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	70.1	76.3	77.0	77.0	71.2	66.1	71.8
1 to 99 days	22.9	8.0	9.9	15.5	20.5	23.1	28.2
100 to 199 days	3.1	4.2	2.6	2.8	3.6	5.3	------
200 days or more	3.9	11.5	10.4	4.7	4.7	5.5	------
REGION II							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	61.0	65.2	66.7	69.3	59.7	54.2	66.8
1 to 99 days	29.7	8.7	21.1	15.1	26.2	27.7	33.2
100 to 199 days	4.0	4.3	5.6	4.0	5.6	8.1	------
200 days or more	5.3	21.7	6.7	11.6	8.6	10.0	------
REGION III							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	67.0	77.8	79.0	72.3	69.4	63.3	69.0
1 to 99 days	26.1	7.8	7.7	17.2	21.8	25.4	31.0
100 to 199 days	3.4	6.3	3.9	4.9	4.5	5.7	------
200 days or more	3.4	8.0	9.4	5.7	4.4	5.5	------
REGION IV							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	71.8	85.8	80.4	75.7	71.8	68.7	72.0
1 to 99 days	22.1	7.8	13.4	17.1	21.8	23.7	28.0
100 to 199 days	3.1	1.9	1.8	3.1	3.6	4.0	------
200 days or more	3.0	4.4	4.5	4.0	2.8	3.6	------
REGION V							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	60.2	82.8	76.4	71.2	66.6	54.2	59.1
1 to 99 days	32.2	6.5	12.1	18.7	24.9	30.2	40.9
100 to 199 days	3.7	0.9	4.5	4.2	5.0	7.8	------
200 days or more	3.8	9.8	6.9	5.9	3.6	7.8	------
REGION VI							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	67.4	80.4	72.4	68.3	67.7	64.5	64.8
1 to 99 days	23.5	9.5	22.1	25.1	23.4	17.1	35.2
100 to 199 days	3.9	7.1	1.6	2.8	3.8	8.3	------
200 days or more	5.2	3.0	3.9	3.8	5.2	10.2	------
REGION VII							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	62.7	77.9	71.4	66.6	60.8	55.5	65.7
1 to 99 days	25.3	11.7	17.4	24.1	26.2	26.2	34.3
100 to 199 days	5.2	2.4	3.9	4.2	6.5	7.4	------
200 days or more	6.8	8.0	7.3	5.2	6.5	10.8	------
REGION VIII							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	72.7	82.1	79.2	77.7	63.8	48.5	90.0
1 to 99 days	8.2	6.0	7.2	9.2	9.9	8.4	10.0
100 to 199 days	4.7	3.4	3.4	4.4	6.6	8.4	------
200 days or more	14.3	8.4	10.2	8.8	19.8	34.8	------
REGION IX							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	72.4	87.0	74.2	59.6	53.5	52.5	68.4
1 to 99 days	17.4	9.5	17.4	23.6	26.3	22.6	31.6
100 to 199 days	4.1	1.2	3.3	7.3	8.6	9.1	------
200 days or more	6.2	2.3	5.1	9.5	11.7	15.8	------
REGION X							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	66.4	82.5	67.5	57.9	38.1	35.3	81.1
1 to 99 days	15.8	9.7	22.3	17.2	19.4	13.7	18.9
100 to 199 days	4.6	1.9	3.2	7.8	10.3	7.5	------
200 days or more	13.3	5.9	7.0	17.1	32.2	43.5	------

TABLE 24.—PERCENT OF OPERATORS OF COTTON FARMS WITH OTHER INCOME OF FAMILY EXCEEDING VALUE OF FARM PRODUCTS SOLD, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
I	6.2	8.0	7.8	5.5	5.9	11.2	------
II	9.8	8.7	14.4	12.6	13.3	19.9	------
III	5.5	6.9	8.3	6.4	5.6	10.0	------
IV	3.9	1.9	2.6	3.1	3.4	6.2	------
V	7.6	2.8	4.9	7.6	6.7	17.9	------
VI	6.8	2.4	3.4	6.6	5.9	14.3	------
VII	9.5	5.6	4.9	6.0	10.0	18.0	------
VIII	12.0	3.5	4.7	6.1	22.6	35.2	------
IX	6.0	1.5	3.1	9.2	16.1	24.6	------
X	11.6	2.6	5.0	14.4	32.8	53.3	------
Total, 10 regions	6.2	2.7	4.3	5.8	6.5	15.8	------

For example, two-thirds or more of the operators of Class VI farms in each region, except Region V, report no days of off-farm work. In Region V, 59 percent of these operators reported no days of off-farm work. For Class V farms about 80 percent of the operators in all regions, except Regions VIII and X—which have very few Class V farms—report less than 100 days of off-farm work. Generally speaking, from two-thirds to three-fourths of those who report less than 100 days of off-farm work did no off-farm work at all.

By definition, the value of farm sales for Class VI farms must exceed the total of family income from off-farm sources. This restriction does not, however, apply to Class V farms. In those regions—I through VII—where Class V farms are found in considerable numbers four-fifths or more of them report the value of farm sales as exceeding total family income from other sources. The value of farm sales on Class V farms is between $1,200 and $2,499. Data on the average level of sales from these farms will be found in Part VII of this report.

MAN-EQUIVALENT WORKERS PER COTTON FARM

The data in table 25 provides a more specific picture of the characteristics and size of the labor resource on cotton farms. These data indicate the average size of the labor force on cotton farms in each economic class for each region, in terms of estimated man-equivalents. A percentage distribution of this labor force in terms of operators, family workers, and hired workers is also given.

The size of the total labor force on cotton farms of various economic classes varies by region. Generally, regions in which mechanization of cotton production has progressed the most show significantly smaller total labor resources per farm than the other regions. Among regions of the humid climatic belt, for example, mechanization is more advanced in Regions IV and VI than in Regions I, II, III, and V. In Regions I, II, III, and V, Class I farms have an average labor force of 10 man-equivalents, while in Regions IV and VI the labor resource on Class I farms is smaller, about 30 and 50 percent, respectively. Similar differences, though not as great, exist among other economic classes of farms in these two groups of regions.

Cotton production in Regions IX and X is also highly mechanized. Region IX has one of the smallest inputs of the labor resource per farm for each economic class of any region. This is particularly striking in the instance of Class I farms.

The labor resources per farm on Class I farms in Region X may not seem to indicate a high degree of mechanization, since the man-equivalents used here are almost twice those indicated for Class I farms in Region IX. Average sales of Class I farms in Region X, however, are more than twice as high as sales for the same class farms in Region IX (see table 31).

The percentage of the labor force which is comprised of operator workers, family workers, and hired workers on different economic classes of cotton farms is of particular interest (see table 25).

TABLE 25.—TOTAL MAN-EQUIVALENT PER ALL COMMERCIAL FARMS AND PER COTTON FARM, AND PERCENT DISTRIBUTION IN EACH ECONOMIC CLASS OF COTTON FARM, BY TYPE OF WORKER, BY REGIONS: 1954

Region and item	All commercial farms	Cotton farms by economic class of farm						
		All classes	I	II	III	IV	V	VI
REGION I								
Total man-equivalent—number	1.6	1.6	9.4	3.4	2.3	1.7	1.4	1.2
Operator—percent	53.6	54.5	8.4	24.1	39.7	51.7	60.3	70.0
Family workers—percent	24.0	30.4	1.5	6.9	30.6	36.1	33.3	27.5
Hired labor—percent	22.4	15.1	90.1	69.0	29.7	12.2	6.4	2.5
REGION II								
Total man-equivalent—number	1.3	1.2	10.0	3.1	2.0	1.5	1.3	1.1
Operator—percent	60.1	65.5	7.8	27.2	40.1	54.0	63.3	75.1
Family workers—percent	25.0	27.8	2.6	4.8	25.0	34.6	31.6	23.0
Hired labor—percent	14.9	6.7	89.6	68.0	34.9	11.4	5.1	1.9
REGION III								
Total man-equivalent—number	1.5	1.5	9.9	3.2	2.2	1.8	1.4	1.2
Operator—percent	56.4	56.9	8.5	26.6	39.2	48.5	58.5	70.9
Family workers—percent	31.4	34.7	1.5	13.0	37.2	42.7	37.5	27.3
Hired labor—percent	12.2	8.4	90.0	60.4	23.6	8.8	4.0	1.8
REGION IV								
Total man-equivalent—number	1.8	1.8	7.7	2.7	2.0	1.8	1.5	1.3
Operator—percent	48.6	48.8	11.7	33.4	43.7	49.7	58.5	70.1
Family workers—percent	30.9	33.0	1.8	12.4	35.6	43.2	38.4	28.6
Hired labor—percent	20.5	18.2	86.5	54.2	20.7	7.1	3.1	1.3
REGION V								
Total man-equivalent—number	1.3	1.5	10.8	3.1	2.1	1.7	1.4	1.2
Operator—percent	59.0	54.9	8.3	27.8	42.0	52.0	58.8	70.7
Family workers—percent	21.7	27.8	1.5	8.6	25.5	33.2	35.1	27.5
Hired labor—percent	19.3	17 3	90.2	63.6	32.5	14.8	6.1	1.8
REGION VI								
Total man-equivalent—number	1.7	1.7	4.6	2.2	1.9	1.6	1.3	1.2
Operator—percent	48.9	51.6	19.8	40.4	47.0	55.8	60.2	69.9
Family workers—percent	17.8	25.1	6.9	12.8	24.0	29.6	32.9	27.3
Hired labor—percent	33.3	23.3	73.3	46.8	29.0	14.6	6.9	2.8
REGION VII								
Total man-equivalent—number	1.6	1.8	8.1	2.8	1.9	1.4	1.2	1.2
Operator—percent	48.4	46.7	10.9	30.7	46.4	56.3	61.9	70.8
Family workers—percent	16.7	16.8	2.1	7.9	15.1	21.9	26.4	24.8
Hired labor—percent	34.9	36.5	87.0	61.4	38.5	21.8	11.7	4.4
REGION VIII								
Total man-equivalent—number	3.3	3.4	9.4	3.2	2.1	1.4	1.1	1.2
Operator—percent	23.6	23.7	9.3	26.7	39.5	48.5	56.9	68.1
Family workers—percent	5.4	5.5	1.6	4.6	8.3	14.7	21.9	23.7
Hired labor—percent	71.0	70.8	89.1	68.7	52.2	36.8	21.2	8.2
REGION IX								
Total man-equivalent—number	1.7	2.7	4.7	2.4	1.6	1.2	1.0	1.1
Operator—percent	48.0	31.9	20.2	37.8	48.6	60.3	67.2	63.9
Family workers—percent	15.8	6.8	3.4	7.8	12.7	15.9	21.7	33.6
Hired labor—percent	36.2	61.3	76.4	54.4	38.7	23.8	11.1	2.5
REGION X								
Total man-equivalent—number	2.8	4.1	8.3	2.0	1.4	1.1	0.9	1.0
Operator—percent	26.3	18.9	10.6	40.4	50.4	51.5	56.2	70.0
Family workers—percent	8.8	5.0	1.9	9.8	16.2	25.7	31.8	26.2
Hired labor—percent	64.9	76.1	87.5	49.8	33.4	22.8	12.0	3.8
TOTAL, 10 REGIONS								
Total man-equivalent—number	1.7	1.7	7.3	2.7	2.0	1.7	1.4	1.2
Operator—percent	49.8	49.9	12.3	32.9	43.4	50.8	59.4	71.2
Family workers—percent	23.4	27.8	2.2	9.4	28.1	38.3	35.9	26.9
Hired labor—percent	26.8	22.3	85.5	57.7	28.5	10.9	4.7	1.9

On Class I cotton farms in the various regions operator and family labor account for from about 10 to 20 percent of the total labor resources used per farm. The percentage of total labor resources supplied by operator and family workers is, however, generally higher in those regions in which it has been most economically feasible to mechanize cotton harvesting. Mechanized harvesting has, in general, been found most feasible in Regions IV, VI, IX, and X. For Class I farms in Region X this tendency is obscured somewhat by the fact that the average size of business for Class I farms in this region is far greater than for any other region.

On Class II farms the proportion of total labor resources accounted for by hired labor varies from a low of just under one-half in Regions VI and X to a high of a little over two-thirds. The highest percentages of the labor resources accounted for by hired labor on this class of farm are found in Regions I, II, and VIII.

This same general regional relationship between the degree of mechanization and the percentage of the labor resources accounted for by hired labor is found on Class III farms. The overall percentages are significantly lower, ranging from a low of about 20 percent to a high of slightly over 50 percent of the total labor resources accounted for by hired labor.

For some regions, such as Regions VII, VIII, IX, and X, even Class IV farms hire a rather substantial proportion of all labor used. In general, however, cotton farms in Economic Classes IV through VI hire very little labor.

Data in table 26 show the percentage distribution of farms in each economic class for each region by designated ranges of total expenditure for hired labor. These data indicate that many of the larger farms are operated primarily with operator and family labor. For example, a considerable percentage of the Class II farms, especially in the more mechanized areas hire relatively small amounts of labor.

TABLE 26.—PERCENT DISTRIBUTION OF FARMS REPORTING SPECIFIED EXPENDITURES FOR HIRED LABOR FOR COTTON FARMS, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	79.6	------	6.1	33.9	74.4	93.7	98.6
500 to 999	10.6	0.3	7.5	23.9	19.5	5.4	1.2
1,000 to 2,499	6.4	2.8	30.7	34.2	5.7	0.9	0.1
2,500 to 4,999	2.0	12.1	35.0	6.6	0.4	------	0.1
5,000 to 9,999	1.0	39.8	17.8	1.4	------	------	------
10,000 to 19,999	0.3	33.7	2.9	------	------	------	(Z)
20,000 and over	0.1	11.3	------	------	------	------	------
REGION II							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	91.1	------	5.9	28.2	78.5	95.6	99.4
500 to 999	5.4	------	8.8	27.5	16.3	3.6	0.5
1,000 to 2,499	2.5	4.3	28.2	35.1	4.6	0.7	0.1
2,500 to 4,999	0.7	8.7	34.7	8.3	0.4	0.1	------
5,000 to 9,999	0.3	34.8	20.6	0.9	0.2	------	------
10,000 to 19,999	(Z)	26.1	1.8	------	------	------	------
20,000 and over	(Z)	26.1	------	------	------	------	------
REGION III							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	87.6	2.4	10.4	36.5	78.5	96.9	99.7
500 to 999	7.3	0.6	10.9	28.7	17.2	2.8	0.3
1,000 to 2,499	3.5	8.6	30.8	30.1	4.1	0.3	(Z)
2,500 to 4,999	0.9	10.5	32.4	3.9	0.2	(Z)	(Z)
5,000 to 9,999	0.4	31.9	13.4	0.7	(Z)	------	------
10,000 to 19,999	0.2	31.4	2.1	0.1	(Z)	------	------
20,000 and over	0.1	14.6	------	------	------	------	------
REGION IV							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	67.0	0.7	10.9	36.9	68.8	94.0	99.3
500 to 999	12.5	1.8	10.1	19.0	22.7	5.1	0.6
1,000 to 2,499	11.4	6.5	28.6	37.0	8.1	0.8	0.1
2,500 to 4,999	4.5	15.7	32.7	6.8	0.4	0.1	------
5,000 to 9,999	2.5	28.6	16.0	0.3	(Z)	(Z)	------
10,000 to 19,999	1.4	29.7	1.7	(Z)	------	------	------
20,000 and over	0.7	17.0	(Z)	------	------	------	------
REGION V							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	73.5	0.6	4.0	20.6	58.7	91.1	99.0
500 to 999	12.7	0.9	6.4	25.2	30.2	8.0	1.0
1,000 to 2,499	8.5	7.0	31.8	43.3	10.3	0.8	(Z)
2,500 to 4,999	3.1	10.3	39.3	10.3	0.8	0.1	------
5,000 to 9,999	1.3	33.7	16.8	0.6	------	------	------
10,000 to 19,999	0.5	23.8	1.7	------	------	------	------
20,000 and over	0.4	23.8	------	------	------	------	------
REGION VI							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	47.7	0.6	8.6	17.0	50.7	84.2	98.3
500 to 999	22.0	10.2	16.0	20.7	36.2	15.4	------
1,000 to 2,499	22.0	9.6	35.0	55.1	12.8	0.4	1.7
2,500 to 4,999	6.3	26.1	34.3	7.2	0.3	------	------
5,000 to 9,999	1.5	33.1	6.1	------	------	------	------
10,000 to 19,999	0.3	11.5	------	------	------	------	------
20,000 and over	0.2	8.9	------	------	------	------	------
REGION VII							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	43.5	0.2	6.0	16.7	40.0	83.2	97.2
500 to 999	23.3	3.0	5.2	19.2	45.4	14.7	1.4
1,000 to 2,499	21.9	6.0	30.3	56.4	14.3	2.1	1.4
2,500 to 4,999	7.6	13.6	46.1	7.3	0.3	------	------
5,000 to 9,999	2.5	37.9	11.4	0.3	------	------	------
10,000 to 19,999	1.0	29.0	1.0	0.1	------	------	------
20,000 and over	0.3	10.3	(Z)	------	------	------	------
REGION VIII							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	19.5	0.5	1.6	7.6	23.9	77.6	88.9
500 to 999	14.1	1.1	2.3	12.1	50.3	13.2	11.1
1,000 to 2,499	25.2	6.6	27.1	55.6	20.3	8.5	------
2,500 to 4,999	17.9	5.8	43.2	22.5	3.1	0.8	------
5,000 to 9,999	12.8	33.0	23.6	1.8	1.8	------	------
10,000 to 19,999	6.8	33.0	2.2	0.4	0.6	------	------
20,000 and over	3.7	20.0	------	------	------	------	------
REGION IX							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	14.7	2.3	9.6	16.8	41.5	84.7	80.0
500 to 999	12.3	3.2	9.5	21.5	39.5	12.7	20.0
1,000 to 2,499	29.3	14.5	36.8	52.6	18.4	2.6	------
2,500 to 4,999	23.1	22.7	36.7	8.8	0.2	------	------
5,000 to 9,999	14.6	38.0	7.2	0.3	0.4	------	------
10,000 to 19,999	5.1	16.4	0.2	------	------	------	------
20,000 and over	0.9	2.9	------	------	------	------	------
REGION X							
Farms with a dollar expenditure of—							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 to 499	15.1	1.3	11.8	19.7	37.2	68.9	88.2
500 to 999	11.8	1.2	10.3	18.8	36.3	27.3	11.8
1,000 to 2,499	21.0	7.8	27.8	46.2	24.5	3.8	------
2,500 to 4,999	16.7	13.8	33.0	13.9	1.6	------	------
5,000 to 9,999	14.2	24.2	15.8	1.4	------	------	------
10,000 to 19,999	10.8	25.6	1.3	------	0.4	----	------
20,000 and over	10.5	26.1	------	------	------	----	------

Z 0.05 percent or less.

TOTAL CROPLAND AND COTTON ACRES PER MAN-EQUIVALENT

Most of the information relating to measures of the relative efficiency with which resources are used on the various economic classes of farms is presented in Section 7. But data concerning the acres of cropland and of cotton harvested per man-equivalent are available in table 27.

In one region (Region IX) there are some special circumstances, which will be noted, but generally speaking, the acreage of cropland harvested per man-equivalent on farms of different economic classes, for a given region, is indicative of the relative efficiency with which the labor resource is used on the various size-of-business groups of farms.

Except for Region IX, there is a steady and substantial increase in cropland harvested per man-equivalent from Class VI through Class II farms for all regions. In Region IX, Class III farms have more cropland harvested per man-equivalent than do farms in Class II.

The extent as well as the fact of increased cropland harvested per unit of labor as between Class VI and Class II farms should be noted. For most regions, Class II farms have about 4 times as much cropland harvested per man-equivalent as do those farms in Economic Class VI. Even between Class III and Class II farms there is, for nearly all regions, a striking increase in cropland per man-equivalent. In 7 of the 10 regions, Class II farms have about 40 percent more acres of cropland per unit of labor than farms in Class III. In Region II, this difference between these two classes is about 38 percent. The differences in cropland acreage per man between classes within these regions seem large enough to suggest that labor is utilized more effectively on larger farms, up to those in Economic Class II.

In Region VII only about 10 percent more cropland is harvested per man on Class II than on Class III farms. Special circumstances, which are discussed later, prevail in Region IX.

While Class I farms are indicated to have much more cropland harvested per worker, in most regions, than do farms in Classes III through VI, there are several regions in which Class II farms indicate more cropland per worker than do those in the largest size-of-business group. This situation is shown to exist in Regions II, III, V, and VII. In Region IX, the acreage of cropland harvested per worker is practically the same for farms in Classes I and II. In the other five regions the acreage of cropland harvested per worker is higher on Class I than on Class II farms.

In the instance of Region IX, the High Plains of Texas, special circumstances require that the data of table 27 be carefully interpreted. Although in this region there is considerable irrigated land, only on Class I farms does there appear to be enough irrigated land for all cotton to be grown under irrigation. The proportions that irrigated land account for of cotton acreage per farm for other economic classes decline rapidly from about 70 percent for Class II, to 25 percent for Class III, and to insignificant percentages for Classes IV through VI. Region IX has a semiarid climate which, in general, means that, in relatively frequent years, there is too little rainfall for good yields. The average yields for nonirrigated crops are, therefore, much lower than for those grown under irrigation. At the same time, both terrain and the period of its development for crop farming favor large-scale mechanized farming units in Region IX. These latter conditions, taken in conjunction with the lack of irrigated land and consequent relatively low output per acre, seem to explain the fact that Classes III and IV farms have larger acreages of cropland per worker in Region IX than do farms in Classes I and II.

TABLE 27.—ACRES OF CROPLAND HARVESTED AND ACRES OF COTTON HARVESTED PER MAN-EQUIVALENT FOR COTTON FARMS, BY ECONOMIC CLASS, AND BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Acres of cropland harvested						
I	31.9	80.1	74.1	43.9	32.9	27.1	18.3
II	25.8	68.3	71.3	52.0	33.3	23.8	17.3
III	20.7	57.7	60.3	35.0	23.3	18.6	13.3
IV	26.1	78.4	63.0	34.5	17.8	11.3	8.5
V	33.3	62.7	70.3	51.0	36.5	25.7	17.5
VI	36.5	84.1	68.2	42.1	26.9	22.3	14.2
VII	80.6	82.7	112.1	99.5	80.0	57.5	32.5
VIII	40.9	49.1	43.8	32.9	27.1	18.2	10.0
IX	120.0	118.1	117.1	132.5	119.2	101.0	38.2
X	55.4	61.8	42.0	28.6	18.2	13.3	6.0
	Acres of cotton harvested						
I	10.0	23.9	21.8	14.3	11.2	8.6	5.8
II	10.0	21.9	26.8	19.5	14.7	10.0	6.4
III	8.7	21.1	21.9	14.5	10.0	7.9	5.0
IV	12.8	30.6	25.6	17.0	10.6	7.3	5.4
V	17.3	30.3	33.9	27.1	20.0	14.3	8.3
VI	18.8	44.6	38.2	21.6	13.8	10.0	5.8
VII	39.4	36.9	54.6	50.0	40.7	29.2	15.8
VIII	23.5	27.3	25.0	21.0	15.7	11.8	6.7
IX	53.3	51.3	53.3	60.6	52.5	47.0	15.5
X	26.3	28.7	22.5	16.4	12.7	8.9	5.0

Section 6.—INVESTMENT ON COTTON FARMS

Information concerning total farm investments and its distribution by major categories is particularly useful. Through the common denominator of estimated dollar value, such data provide the best measure of the quantity of the various kinds and qualities of physical resources that are used in production on cotton farms. Investment data are available to us for three major categories of resources—land and buildings, machinery and equipment, and livestock.

The land and capital resources on these farms are employed for other purposes as well as in cotton production, of course, but, as table 19 shows, the cotton enterprise accounts for an overwhelmingly large proportion of total sales from cotton farms in every region, on each economic class of farm. The continued employment of these resources is, consequently, mainly supported by the cotton enterprise.

The approximately 8.4 billion dollars of investment on cotton farms in our ten regions is an impressive aggregate of resources. It amounts to about 8 percent of the estimated total investment on commercial farms in the United States.

REGIONAL DISTRIBUTION OF TOTAL INVESTMENT AMONG ECONOMIC CLASSES

In this perspective let us examine the distribution of total investment for the ten regions among farms with total annual gross sales of less than $5,000. It seems probable that among such businesses are likely to occur most of the difficulties of remunerating at "opportunity costs" both the resources which comprise the investment aggregate and the human agent of operator and family labor and management.

With respect to this distribution three groups of regions are clearly discernible. In Regions I, II, III, and V, from just under 60 percent to almost 90 percent of total investment is found on farms in Classes IV through VI. A much smaller, but still substantial, proportion of around 35 percent of total investment is found in Regions IV, VI, and VII on farms with gross sales of less than $5,000. In Regions VIII, IX, and X these smaller size-of-business farms account for 9, 5, and 3 percent, respectively, of regional total investment.

TABLE 28.—DISTRIBUTION OF INVESTMENT ON COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and item	All cotton farms	Economic class of farm					
		I	II	III	IV	V	VI
REGION I	*Mil. dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total investment	428.5	8.3	13.2	16.3	26.4	24.4	11.4
Land and buildings	347.7	8.3	13.7	16.3	26.4	24.0	11.3
Machinery and equipment	50.7	9.4	11.5	17.6	25.8	25.2	10.4
Livestock	30.0	6.1	10.8	14.4	26.9	27.1	14.7
REGION II							
Total investment	232.8	1.2	3.8	6.9	19.3	39.2	29.7
Land and buildings	188.8	1.1	3.8	6.8	19.6	38.8	29.8
Machinery and equipment	29.7	1.4	3.7	7.3	18.2	41.8	27.5
Livestock	14.3	1.8	3.9	6.4	17.4	38.3	32.2
REGION III							
Total investment	1,153.2	6.4	8.4	11.4	24.8	31.7	17.3
Land and buildings	944.1	6.6	8.9	11.4	24.9	31.0	17.1
Machinery and equipment	126.2	6.0	6.2	12.0	25.2	35.3	15.4
Livestock	82.9	4.5	6.3	9.7	23.4	33.9	22.1
REGION IV							
Total iuvestment	1,717.7	32.7	18.6	16.4	16.9	12.7	2.8
Land and buildings	1,359.8	33.5	18.1	16.8	16.4	12.3	2.9
Machinery and equipment	306.1	29.9	21.9	15.0	18.2	12.9	2.1
Livestock	51.8	27.1	12.5	13.7	21.2	19.7	5.8
REGION V							
Total investment	248.5	16.8	11.9	14.9	18.4	21.0	17.1
Land and buildings	196.6	17.8	11.9	15.3	17.8	20.4	16.7
Machinery and equipment	30.4	12.7	13.4	13.1	21.9	22.7	16.2
Livestock	21.4	13.3	9.4	13.0	18.9	23.6	21.9
REGION VI							
Total investment	182.6	13.2	25.9	25.8	21.0	10.8	3.3
Land and buildings	154.4	13.6	25.9	25.9	20.9	10.6	3.1
Machinery and equipmeut	20.2	11.2	28.2	25.7	21.5	9.8	3.6
Livestock	8.0	11.1	20.6	22.9	22.4	16.2	6.8
REGION VII	*Mil. dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total investment	1,387.6	15.3	23.1	25.9	22.0	11.0	2.7
Land and buildings	1,191.0	16.0	23.1	26.2	21.4	10.7	2.6
Machinery and equipment	152.2	12.0	24.5	23.8	25.1	11.5	3.2
Livestock	44.4	8.7	17.7	25.3	26.2	17.1	5.0
REGION VIII							
Total investment	384.4	55.6	23.8	11.3	5.5	3.1	0.8
Land and buildings	342.1	56.6	23.1	11.1	5.3	3.1	0.8
Machinery and equipment	37.8	45.9	30.8	12.2	7.6	2.7	0.7
Livestock	4.5	58.7	21.3	12.8	3.5	2.7	0.9
REGION IX							
Total investment	1,130.4	54.8	32.8	7.6	3.4	1.3	0.1
Land and buildings	991.7	56.0	31.9	7.5	3.2	1.3	0.1
Machinery and equipment	125.5	46.0	40.4	7.9	4.2	1.4	0.1
Livestock	13.2	44.4	32.3	12.0	7.4	3.4	0.4
REGION X							
Total investment	1,557.9	79.7	13.2	4.5	2.0	0.5	0.1
Land and buildings	1,328.6	81.0	12.2	4.3	1.8	0.5	0.1
Machinery and equipment	198.1	70.9	20.0	5.4	2.8	0.7	0.1
Livestock	31.3	79.5	13.2	4.8	2.1	0.4	0.1
TOTAL, 10 REGIONS							
Total investment	8,423.7	35.9	18.4	13.5	14.4	12.3	5.4
Land and buildings	7,044.9	37.2	18.2	13.6	14.0	11.8	5.2
Machinery and equipment	1,076.9	32.0	21.4	13.2	15.7	13.0	4.7
Livestock	301.9	20.2	12.0	13.2	20.0	22.1	12.6

INVESTMENT PER FARM

Aggregate investment data for regions and economic classes of cotton farms are useful, but information on average investment per farm for economic classes and regions is perhaps of more widespread interest, and is valuable for several uses. The data on per farm investment are given in table 29. Such data measure more completely than any other available data the relative quantities of physical resources that are used in production on cotton farms of different economic classes in the various regions. They also suggest, at the readily comprehensible level of the individual farm, the quantities of other resources that are used in conjunction with human resources.

Class I farms in all regions have average investments well in excess of $100,000, but there is considerable variation in the average level of investment among regions. The Class I farms in Region X have far larger total investment than do those of any other region.

Total investment in Class II farms shows considerably less regional variation. The range here is from a low of about $45,000 in Region I to a little over $70,000 in Region VII. Considerable regional variation will be observed in total investment per farm for Classes III through VI. The general level decreases from Class III to Class VI. Among Class III farms the range is from about $16,000 for Region I to almost $38,000 in Regions VII and VIII. Class IV farms exhibit a range in total investment of from about $8,000 to more than $26,000. Investment per farm for Class V farms varies from a low of a little more than $4,000 in Region IV to a high of almost $20,000 in Region IX. Class VI farms show a range in investment per farm from about $3,000 to $12,000.

Table 29 also shows the percentage distribution of investment among land and buildings, machinery and equipment, and livestock. Land and buildings account for 75 percent or more of total investment for every region and every economic class of farm. Moreover, there is striking similarity for the different economic classes in each of the ten regions in the percentage of total investment which is accounted for by each of the three major investment components.

TABLE 29.—TOTAL INVESTMENT AND PERCENT DISTRIBUTION OF INVESTMENT PER FARM FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Total investment—dollars	7,469	123,774	45,887	15,867	7,614	5,017	3,104
Land and buildings—percent	81.2	81.4	83.9	81.0	81.3	80.0	80.2
Machinery and equipment—percent	11.8	13.4	10.3	12.8	11.6	12.2	10.8
Livestock—percent	7.0	5.2	5.8	6.2	7.1	7.8	9.0
REGION II							
Total investment—dollars	5,781	119,347	49,141	21,350	9,345	5,692	3,739
Land and buildings—percent	81.1	75.3	81.3	80.6	82.4	80.4	81.5
Machinery and equipment—percent	12.8	15.3	12.4	13.7	12.0	13.6	11.8
Livestock—percent	6.1	9.4	6.3	5.7	5.6	6.0	6.7
REGION III							
Total investment—dollars	6,737	154,708	58,173	19,052	8,745	5,239	3,343
Land and buildings—percent	81.9	84.5	86.7	82.4	82.1	80.1	81.1
Machinery and equipment—percent	10.9	10.4	8.0	11.5	11.1	12.2	9.7
Livestock—percent	7.2	5.1	5.3	6.1	6.8	7.7	9.2
REGION IV							
Total investment—dollars	13,415	187,621	53,685	18,669	8,081	4,271	2,802
Land and buildings—percent	79.2	81.2	77.0	81.2	77.0	77.2	80.5
Machinery and equipment—percent	17.8	16.3	21.0	16.3	19.2	18.1	13.3
Livestock—percent	3.0	2.5	2.0	2.5	3.8	4.7	6.2
REGION V							
Total investment—dollars	11,167	194,311	53,506	24,282	12,459	7,247	4,659
Land and buildings—percent	79.1	84.0	79.4	81.7	76.6	77.0	77.3
Machinery and equipment—percent	12.3	9.2	13.8	10.8	14.6	13.3	11.6
Livestock—percent	8.6	6.8	6.8	7.5	8.8	9.7	11.1
REGION VI							
Total investment—dollars	22,843	143,470	61,210	26,511	16,027	10,820	5,690
Land and buildings—percent	84.5	86.9	84.5	85.1	84.0	83.3	78.8
Machinery and equipment—percent	11.1	9.4	12.0	11.0	11.3	10.0	12.1
Livestock—percent	4.4	3.7	3.5	3.9	4.7	6.7	9.1
REGION VII							
Total investment—dollars	30,872	178,125	72,053	37,942	22,096	13,432	8,106
Land and buildings—percent	85.8	89.6	85.9	86.8	83.7	83.6	81.3
Machinery and equipment—percent	11.0	8.6	11.6	10.1	12.5	11.4	12.8
Livestock—percent	3.2	1.8	2.5	3.1	3.8	5.0	5.9
REGION VIII							
Total investment—dollars	72,538	233,985	70,105	37,882	23,177	15,586	10,989
Land and buildings—percent	89.0	90.7	86.3	88.0	85.7	90.3	89.1
Machinery and equipment—percent	9.8	8.1	12.7	10.7	13.5	8.7	9.5
Livestock—percent	1.2	1.2	1.0	1.3	0.8	1.0	1.4
REGION IX							
Total investment—dollars	77,159	147,607	64,005	36,584	26,399	19,644	12,060
Land and buildings—percent	87.7	89.7	85.2	86.6	83.6	85.1	82.2
Machinery and equipment—percent	11.1	9.3	13.7	11.5	13.8	11.9	13.5
Livestock—percent	1.2	1.0	1.2	1.9	2.6	3.0	4.3
REGION X							
Total investment—dollars	131,386	275,743	67,270	34,363	22,149	12,032	7,873
Land and buildings—percent	85.3	86.7	78.8	82.6	79.7	80.3	81.0
Machinery and equipment—percent	12.7	11.3	19.2	15.3	18.1	18.1	17.9
Livestock—percent	2.0	2.0	2.0	2.1	2.2	1.6	1.1
TOTAL, 10 REGIONS							
Total investment—dollars	16,718	202,214	61,984	25,126	10,846	5,764	3,617
Land and buildings—percent	83.6	86.6	82.8	84.0	81.1	80.1	80.7
Machinery and equipment—percent	12.8	11.4	14.9	12.5	13.9	13.5	11.0
Livestock—percent	3.6	2.0	2.3	3.5	5.0	6.4	8.3

INVESTMENT PER ACRE AND PER MAN-EQUIVALENT

The investment data per farm of table 29 were divided by acres of all land, acres of cropland, and number of man-equivalent workers per farm, to obtain the investment measures per farm shown in table 30.

Perhaps the most significant economic measure of those shown in table 30 is investment per man-equivalent worker. This measure provides an index of the relationship of other productive resources to the human resources used on these farms.

In general there is a steady and substantial increase in investment per worker from Class VI to Class I farms for all regions. For the 10 regions, taken as a whole, the average investment per worker on Class VI farms is about $3,000, the comparable average for Class I farms is almost $28,000. Examination of the data in table 30 for individual regions reveals some striking differences between regions for the same economic classes of farms. In general, it will be observed that investment per worker is much lower for each economic class of farm in Regions I though V than in Regions VI through X. It is interesting to note that in several of the western regions average investment per worker is higher on Classes IV and V farms than such investment on Classes I and II farms in some of the eastern regions.

TABLE 30.—TOTAL INVESTMENT PER ACRE OF ALL LAND IN FARMS, PER ACRE OF TOTAL CROPLAND, AND PER MAN-EQUIVALENT, FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Investment per acre of—							
All land in farms	71	68	74	78	75	68	60
Cropland	122	131	146	133	119	111	109
Investment per man-equivalent	4,668	13,167	13,496	6,899	4,479	3,584	2,587
REGION II							
Investment per acre of—							
All land in farms	72	55	68	72	83	76	64
Cropland	145	124	150	142	147	146	143
Investment per man-equivalent	4,818	11,935	15,852	10,675	6,230	4,379	3,399
REGION III							
Investment per acre of—							
All land in farms	83	99	105	97	92	80	63
Cropland	167	196	210	182	164	160	150
Investment per man-equivalent	4,491	15,627	18,179	8,660	4,858	3,742	2,786
REGION IV							
Investment per acre of—							
All land in farms	178	189	205	183	167	155	111
Cropland	246	269	206	242	224	211	188
Investment per man-equivalent	7,453	24,366	19,883	9,335	4,489	2,847	2,155
REGION V							
Investment per acre of—							
All land in farms	76	104	94	79	75	69	58
Cropland	150	198	170	165	143	134	126
Investment per man-equivalent	7,445	17,992	17,260	11,563	7,329	5,176	3,883
REGION VI							
Investment per acre of—							
All land in farms	194	178	204	196	216	179	139
Cropland	312	290	336	291	329	323	266
Investment per man-equivalent	13,437	31,189	27,823	13,953	10,017	8,323	4,742
REGION VII							
Investment per acre of—							
All land in farms	123	162	135	118	114	106	90
Cropland	174	232	189	164	158	155	155
Investment per man-equivalent	17,151	21,991	25,733	19,969	15,783	11,193	6,755
REGION VIII							
Investment per acre of—							
All land in farms	341	330	342	362	385	398	364
Cropland	418	417	402	418	475	504	416
Investment per man-equivalent	21,335	24,892	21,908	18,039	16,555	14,169	9,158
REGION IX							
Investment per acre of—							
All land in farms	170	193	173	112	105	88	62
Cropland	216	246	208	151	158	143	186
Investment per man-equivalent	28,577	31,406	26,669	22,865	21,999	19,644	10,964
REGION X							
Investment per acre of—							
All land in farms	242	228	310	323	317	497	824
Cropland	444	414	597	643	790	718	1,028
Investment per man-equivalent	32,046	33,222	33,636	24,546	20,135	13,369	7,873
TOTAL, 10 REGIONS							
Investment per acre of—							
All land in farms	135	196	165	129	112	92	68
Cropland	217	302	241	194	174	161	146
Investment per man-equivalent	9,834	27,701	22,957	12,563	6,380	4,117	3,014

Section 7.—SELECTED MEASURES OF FARM INCOME AND EFFICIENCY

In this section two additional sets of basic data are presented for economic classes of cotton farms in the ten regions. These are the value of sales per farm, and per farm amounts of expenditure for a number of items of cash-production expense. The per farm totals of these designated items of cash-production expenses are referred to as "specified expenses."

The basic data on average sales per farm are shown in table 31; those concerning designated items of expense are given in table 32.

The data relating to average sales per farm probably provide the best available measure of both the absolute and the relative sizes of farm business that are found on the various economic classes of cotton farms.

In recent years concern has been expressed in some quarters about the fact of secularly increasing size-of-farm businesses. This report is not, of course, designed to analyze the complex relationships between social goals and necessary economic adjustments on farms that are involved in questions relating to trends in size-of-farm businesses. An examination of the average levels of total sales on the three largest size-of-business groups of cotton farms does, however, provide an objective measure of the size of these largest cotton farms.

Class I farms include all those with sales of $25,000 or more. Except for Region X where the average is $110,000, the farms in this class have average total sales of from $40,000 to $60,000.

TABLE 31.—TOTAL SALES, COTTON SALES, ALL CROP SALES, AND LIVESTOCK AND LIVESTOCK PRODUCTS SALES PER COTTON FARM, BY ECONOMIC CLASS, AND BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Total sales	2,761	42,084	14,349	6,479	3,412	1,770	795
All crops	2,557	37,676	12,659	5,995	3,205	1,653	750
Cotton	2,026	29,902	9,830	4,528	2,502	1,354	647
All livestock and livestock products	193	3,958	1,602	461	198	113	42
REGION II							
Total sales	1,656	48,196	14,364	6,839	3,290	1,732	775
All crops	1,543	36,822	12,656	6,041	3,062	1,635	734
Cotton	1,390	29,252	10,553	5,015	2,731	1,492	683
All livestock and livestock products	101	8,565	1,559	725	203	86	37
REGION III							
Total sales	2,142	50,842	14,397	6,395	3,317	1,729	757
All crops	1,966	44,905	12,755	5,764	3,058	1,605	703
Cotton	1,837	38,935	11,367	5,348	2,868	1,522	670
All livestock and livestock products	168	5,653	1,588	606	248	117	50
REGION IV							
Total sales	4,559	57,071	14,643	6,693	3,379	1,769	797
All crops	4,405	54,336	14,118	6,498	3,292	1,731	774
Cotton	3,957	45,309	12,157	5,891	3,118	1,674	753
All livestock and livestock products	151	2,677	515	192	84	38	22
REGION V							
Total sales	2,758	60,316	14,157	6,573	3,359	1,706	658
All crops	2,464	53,526	12,684	5,924	3,003	1,527	582
Cotton	2,288	48,899	11,398	5,509	2,842	1,452	534
All livestock and livestock products	285	6,650	1,449	630	349	171	71
REGION VI							
Total sales	5,380	39,893	14,385	6,831	3,663	1,894	787
All crops	5,038	37,458	13,558	6,430	3,419	1,729	704
Cotton	4,517	31,215	12,276	5,938	3,047	1,551	673
All livestock and livestock products	341	2,432	822	399	243	165	83
REGION VII							
Total sales	5,967	52,695	14,473	6,908	3,613	1,915	840
All crops	5,474	50,747	13,418	6,266	3,203	1,660	735
Cotton	4,491	37,622	10,995	5,286	2,766	1,472	673
All livestock and livestock products	492	1,943	1,054	641	410	255	106
REGION VIII							
Total sales	16,920	59,207	16,670	7,826	3,513	1,918	835
All crops	16,440	57,260	16,337	7,632	3,432	1,878	827
Cotton	13,751	46,999	13,957	6,577	2,997	1,668	783
All livestock and livestock products	479	1,944	333	194	81	39	7
REGION IX							
Total sales	21,812	46,675	16,962	7,723	3,976	1,969	721
All crops	21,210	45,600	16,472	7,365	3,656	1,761	617
Cotton	17,188	36,248	13,650	6,313	3,166	1,565	578
All livestock and livestock products	602	1,075	490	358	319	207	105
REGION X							
Total sales	47,880	110,441	15,996	7,192	3,921	1,880	858
All crops	45,799	105,776	15,192	6,765	3,695	1,837	854
Cotton	36,516	83,358	12,963	5,978	3,352	1,753	847
All livestock and livestock products	2,080	4,664	802	426	218	43	6

It will be remembered that the range of sales volume possible for farms in Class II is from $10,000 to $24,999. The midpoint of such a range is $17,500. In no region does average sales per farm for Class II farms go as high as the midpoint of the range for the class. In most regions, sales for this class average from $14,000 to $15,000 per farm.

For Class III farms the most general level of average sales found in the regions is about $6,500. The possible range of sales in this class is, of course, from $5,000 to $9,999. Only in Regions VIII and IX, where average sales are $7,800 and $7,700, respectively, does total farm sales of Class III farms reach the midpoint of the sales range for the class.

It seems doubtful that sales volumes such as the averages for farms in these classes would, in the instance of any type of non-farm business, be taken to connote unusually large or economically menacing size.

In this general context it is also important to look at per farm sales on the three smallest economic classes from the standpoint of the adequacy of business volume to supply generally acceptable levels of income to a farm family.

The range among regions for average sales per Class IV cotton farms is from almost $3,300 to almost $4,000. For Class V farms the comparable range is from about $1,730 to $1,970, while the range in region-average total sales for Class VI cotton farms is from about $660 to about $860.

TABLE 32.—PERCENT OF FARMS REPORTING AND AVERAGE EXPENDITURE FOR SELECTED ITEMS PER FARM, FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION I							
Machine hire:							
Percent of farms reporting	67.8	60.6	63.9	69.9	68.7	68.4	65.9
Dollars per farm reporting	146	1,528	661	343	171	106	57
Hired labor:							
Percent of farms reporting	65.4	98.3	96.2	84.2	75.8	64.6	48.6
Dollars per farm reporting	479	11,581	3,204	1,023	353	185	87
Feed for livestock and poultry:							
Percent of farms reporting	46.0	61.7	65.6	54.1	46.0	43.2	45.6
Dollars per farm reporting	151	1,664	731	316	144	98	67
Gasoline, fuel, and oil:							
Percent of farms reporting	47.0	95.8	96.6	77.6	57.8	43.4	28.2
Dollars per farm reporting	305	3,730	1,401	492	241	154	88
Fertilizer and fertilizer material:							
Percent of farms reporting	97.2	99.0	97.4	98.5	97.6	96.7	97.1
Dollars per farm reporting	444	6,866	2,471	915	474	320	167
Lime and liming material:							
Percent of farms reporting	4.5	29.3	21.9	10.8	5.0	3.6	1.6
Dollars per farm reporting	112	388	270	129	83	63	54
Average of specified expenses per farm dollars	1,062	23,814	7,804	2,569	1,056	612	298
REGION II							
Machine hire:							
Percent of farms reporting	63.2	56.5	48.9	59.7	65.5	63.1	62.9
Dollars per farm reporting	90	1,191	670	342	152	95	54
Hired labor:							
Percent of farms reporting	51.5	100.0	94.4	90.5	69.3	56.5	40.5
Dollars per farm reporting	226	12,110	3,062	1,073	346	161	74
Feed for livestock and poultry:							
Percent of farms reporting	44.8	87.0	48.3	48.3	43.4	42.8	46.6
Dollars per farm reporting	121	2,216	984	536	218	115	72
Gasoline, fuel, and oil:							
Percent of farms reporting	42.1	100.0	94.4	85.9	59.9	45.0	32.6
Dollars per farm reporting	154	3,023	1,302	551	222	122	73
Fertilizer and fertilizer material:							
Percent of farms reporting	97.2	100.0	95.0	99.3	96.5	97.6	97.1
Dollars per farm reporting	281	8,394	2,608	1,197	479	281	158
Lime and liming material:							
Percent of farms reporting	5.1	52.2	23.3	21.4	9.7	5.4	2.7
Dollars per farm reporting	81	542	334	122	103	65	41
Average of specified expenses per farm dollars	569	26,411	7,481	3,123	1,036	533	276
REGION III							
Machine hire:							
Percent of farms reporting	55.1	69.1	61.6	56.2	54.2	56.4	53.6
Dollars per farm reporting	112	2,060	722	298	160	91	49
Hired labor:							
Percent of farms reporting	52.2	97.9	92.5	80.0	64.9	52.5	40.1
Dollars per farm reporting	317	12,188	2,772	856	317	143	69
Feed for livestock and poultry:							
Percent of farms reporting	53.6	66.1	63.8	60.2	52.4	51.2	56.0
Dollars per farm reporting	128	2,000	752	347	168	102	71
Gasoline, fuel, and oil:							
Percent of farms reporting	43.4	97.7	93.0	80.7	61.0	44.1	26.7
Dollars per farm reporting	200	3,386	1,106	430	213	123	72
Fertilizer and fertilizer material:							
Percent of farms reporting	95.5	98.9	97.2	97.2	96.2	95.7	94.6
Dollars per farm reporting	237	4,326	1,387	589	330	201	119
Lime and liming material:							
Percent of farms reporting	2.2	23.6	15.0	7.5	4.0	1.7	.7
Dollars per farm reporting	110	633	249	138	89	66	44
Average of specified expenses per farm dollars	612	22,414	5,903	1,992	832	426	226
REGION IV							
Machine hire:							
Percent of farms reporting	68.5	70.1	73.3	69.3	67.7	68.5	67.8
Dollars per farm reporting	320	3,366	1,124	474	236	132	75
Hired labor:							
Percent of farms reporting	56.1	98.9	95.4	79.3	59.7	46.9	34.5
Dollars per farm reporting	1,104	12,644	2,887	1,004	399	184	85
Feed for livestock and poultry:							
Percent of farms reporting	40.8	50.4	54.2	47.9	42.5	35.6	40.0
Dollars per farm reporting	166	1,444	373	181	118	88	88
Gasoline, fuel, and oil:							
Percent of farms reporting	49.6	98.5	95.3	76.1	53.4	37.5	29.9
Dollars per farm reporting	462	3,989	1,064	422	209	120	75
Fertilizer and fertilizer material:							
Percent of farms reporting	87.9	95.1	90.9	87.4	88.2	88.8	82.6
Dollars per farm reporting	281	3,285	877	364	198	120	75
Lime and liming material:							
Percent of farms reporting	1.5	11.3	5.0	2.9	1.1	0.6	0.8
Dollars per farm reporting	244	713	248	200	93	61	55
Average of specified expenses per farm dollars	1,386	22,726	5,603	1,856	735	360	201
REGION V							
Machine hire:							
Percent of farms reporting	49.1	66.5	63.4	60.6	55.9	49.2	43.1
Dollars per farm reporting	228	3,630	1,265	439	225	119	61
Hired labor:							
Percent of farms reporting	57.4	99.5	96.2	86.7	78.8	60.1	38.4
Dollars per farm reporting	723	15,311	3,190	1,197	497	219	86
Feed for livestock and poultry:							
Percent of farms reporting	69.7	57.2	63.0	66.3	64.8	65.3	76.4
Dollars per farm reporting	202	2,974	773	401	222	159	117
Gasoline, fuel, and oil:							
Percent of farms reporting	53.9	100.0	96.4	85.8	77.6	58.2	32.0
Dollars per farm reporting	302	3,549	1,000	479	272	163	84
Fertilizer and fertilizer material:							
Percent of farms reporting	82.9	83.3	90.9	85.8	83.8	82.5	81.9
Dollars per farm reporting	243	3,199	880	459	307	192	105
Lime and liming material:							
Percent of farms reporting	1.3	10.7	4.0	1.7	3.2	0.8	0.4
Dollars per farm reporting	126	381	174	162	99	105	42
Average of specified expenses per farm dollars	1,033	25,609	6,128	2,378	1,133	548	262
REGION VI							
Machine hire:							
Percent of farms reporting	55.4	85.1	68.4	69.8	49.1	48.5	43.7
Dollars per farm reporting	361	2,408	757	387	215	103	66
Hired labor:							
Percent of farms reporting	81.4	93.5	93.5	89.9	87.7	73.3	56.3
Dollars per farm reporting	958	7,303	2,224	1,236	523	254	121
Feed for livestock and poultry:							
Percent of farms reporting	72.9	75.0	69.5	74.7	72.9	72.7	72.8
Dollars per farm reporting	259	1,062	506	320	207	161	137
Gasoline, fuel, and oil:							
Percent of farms reporting	76.8	100.0	94.2	92.6	77.9	66.6	49.3
Dollars per farm reporting	310	1,648	624	358	199	143	79
Fertilizer and fertilizer material:							
Percent of farms reporting	45.8	66.7	48.3	42.2	47.8	50.2	34.7
Dollars per farm reporting	229	1,466	450	257	151	125	77
Lime and liming material:							
Percent of farms reporting	0.5	0.6	------	0.3	0.6	0.8	-----
Dollars per farm reporting	71	1,250	------	5	45	40	-----
Average of specified expenses per farm dollars	1,513	12,303	3,754	2,059	942	512	262

TABLE 32.—PERCENT OF FARMS REPORTING AND AVERAGE EXPENDITURE FOR SELECTED ITEMS PER FARM, FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954—Continued

Region and item	Economic class of farm						
	All classes	I	II	III	IV	V	VI
REGION VII							
Machine hire:							
Percent of farms reporting	82.9	88.4	91.7	89.4	84.6	77.3	68.1
Dollars per farm reporting	453	3,128	1,022	507	288	169	89
Hired labor:							
Percent of farms reporting	85.6	99.5	98.4	94.4	89.9	77.2	59.3
Dollars per farm reporting	1,262	11,169	2,973	1,298	606	315	142
Feed for livestock and poultry:							
Percent of farms reporting	69.9	58.9	70.3	73.5	71.4	68.9	62.8
Dollars per farm reporting	288	871	513	331	267	192	128
Gasoline, fuel, and oil:							
Percent of farms reporting	90.4	99.7	98.2	96.8	93.0	86.6	69.4
Dollars per farm reporting	447	2,151	893	531	328	222	136
Fertilizer and fertilizer material:							
Percent of farms reporting	21.4	29.1	23.4	24.8	20.6	20.0	16.0
Dollars per farm reporting	217	1,138	363	228	161	115	74
Lime and liming material:							
Percent of farms reporting	0.2	0.8	0.2	0.2	0.3	0.1	----
Dollars per farm reporting	62	154	134	48	46	45	----
Average of specified expenses per farm dollars	2,107	16,867	5,184	2,493	1,318	721	331
REGION VIII							
Machine hire:							
Percent of farms reporting	58.5	69.1	62.9	53.5	49.5	56.3	59.3
Dollars per farm reporting	1,031	2,919	966	503	319	223	99
Hired labor:							
Percent of farms reporting	93.8	100.0	98.1	97.4	91.8	85.4	66.7
Dollars per farm reporting	4,171	13,957	3,735	1,842	981	441	239
Feed for livestock and poultry:							
Percent of farms reporting	34.1	37.2	40.0	35.2	29.2	25.8	29.6
Dollars per farm reporting	565	1,508	403	415	372	116	94
Gasoline, fuel, and oil:							
Percent of farms reporting	91.8	98.9	98.3	96.5	89.5	78.8	61.1
Dollars per farm reporting	1,109	3,128	1,108	623	360	230	182
Fertilizer and fertilizer material:							
Percent of farms reporting	48.7	68.0	54.5	50.4	39.0	31.7	27.8
Dollars per farm reporting	826	2,198	677	309	201	117	74
Lime and liming material:							
Percent of farms reporting	0.4	1.8	----	0.4	----	----	----
Dollars per farm reporting	319	376	----	134	----	----	----
Average of specified expenses per farm dollars	6,129	21,132	5,891	2,966	1,567	752	378
REGION IX							
Machine hire:							
Percent of farms reporting	90.7	94.2	90.7	90.7	91.2	75.9	47.6
Dollars per farm reporting	1,431	2,801	1,157	592	352	207	123
Hired labor:							
Percent of farms reporting	93.0	99.0	94.5	92.0	85.3	74.6	23.8
Dollars per farm reporting	3,284	6,665	2,440	1,266	618	286	259
Feed for livestock and poultry:							
Percent of farms reporting	65.3	59.9	67.1	68.7	69.5	64.9	57.1
Dollars per farm reporting	470	695	440	367	331	231	138
Gasoline, fuel, and oil:							
Percent of farms reporting	98.0	98.7	99.0	98.0	96.1	92.1	85.7
Dollars per farm reporting	1,538	2,951	1,303	675	449	301	145
Fertilizer and fertilizer material:							
Percent of farms reporting	15.7	28.0	13.8	7.7	5.6	86	4.8
Dollars per farm reporting	691	1,035	406	239	108	53	80
Lime and liming material:							
Percent of farms reporting	(Z)	(Z)	0.1	----	----	----	----
Dollars per farm reporting	50	270	6	----	----	----	----
Average of specified expenses per farm dollars	6,274	12,858	4,998	2,633	1,515	802	327
REGION X							
Machine hire:							
Percent of farms reporting	81.3	86.7	84.4	77.9	73.7	61.5	63.2
Dollars per farm reporting	3,365	7,023	1,356	634	357	322	79
Hired labor:							
Percent of farms reporting	93.1	99.1	94.5	89.0	89.8	78.6	44.7
Dollars per farm reporting	9,099	19,834	2,828	1,418	750	352	188
Feed for livestock and poultry:							
Percent of farms reporting	43.8	38.2	51.4	48.4	44.3	33.4	36.8
Dollars per farm reporting	1,298	3,016	490	554	277	225	155
Gasoline, fuel, and oil:							
Percent of farms reporting	94.6	97.6	97.9	95.0	88.8	77.1	65.8
Dollars per farm reporting	2,001	4,103	966	535	291	177	84
Fertilizer and fertilizer material:							
Percent of farms reporting	77.4	92.1	79.6	70.2	58.5	47.5	18.4
Dollars per farm reporting	2,612	5,214	717	303	176	108	53
Lime and liming material:							
Percent of farms reporting	1.6	1.8	1.8	2.2	0.4	----	----
Dollars per farm reporting	562	847	418	253	250	----	----
Average of specified expenses per farm dollars	15,695	35,726	5,593	2,751	1,422	738	256

Z 0.05 percent or less.

The interpretation of these sales levels in terms of the levels of income from farming that are associated with them is facilitated by examination of the data in table 33. In this table the total of specified production expense items has been subtracted from total sales per farm. The fact should be borne in mind that, in general, the total of these specified items of expense probably does not exceed 60 percent of total cash production expenses when all items are included.

For Class IV farms the sales minus specified expenses per farm are, for most regions, between $2,200 and $2,500. Only in Regions IV and VI, which show $2,600 and $2,700, respectively, does the average of sales minus specified expenses for Class IV farms exceed $2,500.

In the instance of Class V farms, the cash incomes above specified expenses are between $1,100 and $1,200 for seven of the ten regions. Farms in Region IV have the highest value for per farm sales minus specified expenses for Class V farms. This is shown to be $1,400.

For farms in Class VI average value of sales minus specified expenses for the ten regions is $520. The highest value for any region is $603, while in the region having the lowest value the amount is $394.

TABLE 33.—SALES MINUS SPECIFIED EXPENSES PER FARM FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	1,699	18,272	6,546	3,910	2,355	1,158	496
II	1,087	21,787	6,884	3,716	2,254	1,199	498
III	1,530	28,429	8,494	4,403	2,485	1,303	531
IV	3,172	34,345	9,039	4,836	2,644	1,409	596
V	1,725	34,711	8,029	4,195	2,227	1,159	396
VI	3,867	27,590	10,631	4,772	2,721	1,382	524
VII	3,860	35,828	9,289	4,415	2,295	1,194	509
VIII	10,791	38,076	10,779	4,869	1,946	1,166	457
IX	15,538	33,817	11,964	5,090	2,461	1,167	394
X	32,185	74,714	10,403	4,441	2,499	1,142	603
Total, 10 regions	3,406	46,103	9,887	4,547	2,478	1,289	520

It has been mentioned that, since Census data do not cover all cash expense items, the value of sales less specified expenses per farm probably overstates net cash farm income. It also probably overstates, even more, net incomes on tenant-operated farms since they receive only a share of crops. There is one important item of noncash cost for which it is possible to make an estimate using Census data as a basis. This is interest on investment per farm. Estimated values for this item are shown in table 34. These values were obtained by applying rates of 5 percent to value of investment in land and buildings, and 7 percent to the value of investment in machinery and equipment and livestock.

TABLE 34.—ESTIMATED INTEREST ON INVESTMENT PER FARM FOR COTTON FARMS, BY ECONOMIC CLASS, BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	403	6,684	2,432	857	373	246	149
II	312	6,564	2,654	1,153	495	307	202
III	364	7,735	3,083	1,029	472	283	181
IV	724	10,132	2,953	1,008	444	235	151
V	603	10,298	2,889	1,311	685	399	252
VI	1,211	7,604	3,244	1,405	849	573	307
VII	1,636	9,263	3,819	2,011	1,171	712	438
VIII	3,772	12,167	3,716	1,970	1,228	810	571
IX	4,012	7,676	3,392	1,939	1,399	1,041	651
X	6,963	14,614	3,633	1,821	1,196	650	425
Total, 10 regions	886	10,717	3,285	1,332	586	311	195

When this allowance is made for remuneration of the aggregate of physical sources that are employed, the residual of sales that is left to compensate the human agent, to take care of nonspecified cash expenses, and to allow for replacement of worn-out equipment, is strikingly small on the three smallest size-of-business groups. Even for Class III farms, the residual of around $3,000 per farm for most regions suggests very modest returns to the people involved.

TABLE 35.—SALES PER FARM MINUS SPECIFIED EXPENSES AND IMPUTED INTEREST ON INVESTMENT FOR ECONOMIC CLASSES OF COTTON FARMS, BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	1,296	11,588	4,114	3,053	1,982	912	347
II	775	15,223	4,230	2,563	1,759	892	296
III	1,166	20,694	5,411	3,374	2,013	1,020	350
IV	2,448	24,213	6,086	3,828	2,200	1,174	445
V	1,122	24,413	5,140	2,884	1,542	760	144
VI	2,656	19,986	7,387	3,367	1,872	809	217
VII	2,224	26,565	5,470	2,404	1,124	482	71
VIII	7,019	25,909	7,063	2,890	718	356	−114
IX	11,526	26,141	8,572	3,151	1,062	126	−257
X	25,222	60,100	6,770	2,620	1,303	492	178
Total, 10 regions	2,520	35,386	6,602	3,215	1,892	978	325

Data that relate more specifically to the levels of labor productivity on cotton farms are provided in tables 36 and 37. In these tables sales per farm minus specified expenses, and sales per farm minus both specified expenses and imputed interest on investment have been divided by the estimated man-equivalent workers per farm.

For these two tables expenditures for hired labor were not deducted. This procedure was used because hired workers are a component of the farm labor resources. The reader should keep in mind that not all cash expenses are allowed for, and that no deduction has been made for depreciation. The values shown in these two tables, therefore, overstate the net output and productivity of the human agent.

Attention is invited to the relatively modest values shown for even the largest farms. In a different context, and with different implications, it is important to note also the progressive increase shown in this crude measure of labor productivity as the size of business increases from Class VI to Class I in any region.

TABLE 36.—SALES MINUS SPECIFIED EXPENSES (EXCEPT HIRED LABOR) PER MAN-EQUIVALENT, FOR COTTON FARMS, BY ECONOMIC CLASS AND REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	1,272	3,153	2,784	2,121	1,548	911	435
II	959	3,372	3,132	2,324	1,640	1,027	470
III	1,121	4,064	3,453	2,281	1,478	947	461
IV	2,091	6,055	4,346	2,742	1,600	1,005	499
V	1,393	4,631	3,564	2,544	1,546	942	356
VI	2,789	7,421	5,743	3,091	2,031	1,176	493
VII	2,788	5,846	4,359	3,037	1,925	1,153	507
VIII	4,405	5,504	4,488	3,202	1,927	1,435	524
IX	6,860	8,667	6,097	3,755	2,462	1,325	401
X	9,866	11,395	6,264	3,979	2,907	1,716	716
Total, 10 regions	2,401	8,105	4,734	2,748	1,618	984	459

TABLE 37.—SALES MINUS SPECIFIED EXPENSES (EXCEPT HIRED LABOR) AND IMPUTED INTEREST ON INVESTMENT PER MAN-EQUIVALENT, FOR COTTON FARMS, BY ECONOMIC CLASS AND REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	1,020	2,442	2,069	1,748	1,329	735	311
II	699	2,716	2,276	1,747	1,310	791	286
III	878	3,283	2,490	1,813	1,216	745	310
IV	1,689	4,739	3,252	2,238	1,353	848	383
V	991	3,678	2,632	1,920	1,143	657	146
VI	2,077	5,768	4,268	2,352	1,500	735	237
VII	1,879	4,702	2,995	1,979	1,089	560	142
VIII	3,296	4,210	3,327	2,264	1,050	699	48
IX	5,374	7,034	4,684	2,543	1,296	284	−191
X	8,168	9,634	4,448	2,678	1,820	994	291
Total, 10 regions	1,880	6,637	3,517	2,082	1,273	762	297

INDICATED RETURNS PER OPERATOR AND FAMILY MAN-EQUIVALENT WORKER

The data examined above give some indication of the productivity and possible returns to all labor. Data are presented in tables 38 and 39 to indicate returns to operator and family labor and management. Table 38 shows the return per man-equivalent operator and family worker for the use of capital and their labor and management.

TABLE 38.—SALES MINUS SPECIFIED EXPENSES PER OPERATOR AND FAMILY WORKER FOR COTTON FARMS, BY ECONOMIC CLASS AND REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	1,214	20,302	6,546	2,444	1,570	891	413
II	988	21,787	6,884	2,858	1,734	999	453
III	1,093	28,429	6,534	2,590	1,462	1,002	443
IV	2,115	34,345	7,532	3,023	1,555	939	458
V	1,438	31,555	7,299	2,996	1,485	892	330
VI	2,975	22,992	8,859	3,409	1,944	1,152	437
VII	3,509	32,571	8,445	3,679	2,086	1,086	463
VIII	10,791	38,076	10,779	4,860	2,162	1,295	415
IX	15,538	30,743	10,876	5,090	2,734	1,297	358
X	32,185	67,922	10,403	4,934	2,777	1,428	603
Total, 10 regions	2,620	41,381	8,988	3,248	1,652	992	433

In table 39, on the other hand, imputed interest on investment has been deducted. The indication here, therefore, is of return to operator and family labor and management per man-equivalent worker.

TABLE 39.—SALES MINUS SPECIFIED EXPENSES AND IMPUTED INTEREST ON INVESTMENT PER MAN-EQUIVALENT OF OPERATOR AND FAMILY WORKERS FOR ECONOMIC CLASSES OF COTTON FARMS, BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
I	926	12,875	4,114	1,908	1,321	702	289
II	705	15,223	4,230	1,972	1,353	743	269
III	833	20,694	4,162	1,985	1,184	785	292
IV	1,632	24,213	5,072	2,392	1,294	783	342
V	935	22,194	4,673	2,060	1,028	585	120
VI	2,043	16,655	6,156	2,405	1,337	674	181
VII	2,022	24,150	4,973	2,003	1,022	438	65
VIII	7,019	25,909	7,063	2,890	798	396	−104
IX	11,526	23,765	7,793	3,151	1,180	140	−234
X	25,222	54,636	6,770	2,911	1,448	615	178
Total, 10 regions	1,938	32,169	6,002	2,296	1,261	752	271

It will be observed that for Class VI farms the returns per worker for both capital and labor and management are below $500 in all regions except one; there it is only $600.

After allowing for interest on investment, the range among regions of indicated returns per operator and family worker on the various size-of-business groups is as follows: Class VI—from a loss to about $342; Class V—from $140 to $785; Class IV—from about $800 to about $1,450; Class III—from about $1,910 to about $2,910; Class II—from about $4,100 to about $7,800; and Class I—from $12,875 to $54,636.

INVESTMENT PER DOLLAR OF SALES

In table 40 data are given that show the ratio of total investment to total sales and to sales minus specified expenses. These data afford a very rough indication of the relative productivity of capital employed on the various economic classes of cotton farms, in the different regions. In a general way, relatively low values of investment per dollar of sales indicate relatively high productivity of capital.

The principal conclusion which might tentatively be drawn from these data is that the productivity of capital—like that of labor—is generally higher on the larger than on the smaller size-of-business farms.

TABLE 40.—TOTAL INVESTMENT ON COTTON FARMS PER DOLLAR OF SALES, BY ECONOMIC CLASS OF FARM, BY REGIONS: 1954

Region	Economic class of farm						
	All classes	I	II	III	IV	V	VI
	Investment per dollar of gross sales (dollar)						
I	2.71	2.94	3.20	2.45	2.23	2.83	3.91
II	3.49	2.48	3.42	3.12	2.84	3.29	4.83
III	3.14	3.04	4.04	2.98	2.64	3.03	4.41
IV	2.94	3.29	3.67	2.79	2.39	2.41	3.52
V	4.05	3.22	3.78	3.69	3.71	4.25	7.08
VI	4.25	3.60	4.26	3.88	4.38	5.71	7.23
VII	5.17	3.38	4.98	5.49	6.12	7.01	9.64
VIII	4.29	3.95	4.21	4.84	6.60	8.13	13.16
IX	3.54	3.16	3.77	4.74	6.64	9.98	16.72
X	2.74	2.50	4.21	4.78	5.65	6.40	9.16
Total, 10 regions	3.34	2.92	4.03	3.71	3.18	3.27	4.72
	Investment per dollar of sales less specified expenses (dollars)						
I	4.40	6.77	7.01	4.06	3.23	4.33	6.25
II	5.32	5.48	7.14	5.75	4.15	4.75	7.50
III	4.40	5.44	6.85	4.33	3.52	4.02	6.29
IV	4.23	5.46	5.94	3.86	3.06	3.03	4.70
V	6.47	5.60	6.66	5.79	5.60	6.25	11.77
VI	5.91	5.20	5.76	5.56	5.89	7.83	10.85
VII	8.00	4.97	7.76	8.59	9.63	11.25	15.91
VIII	6.72	6.15	6.50	7.79	11.91	13.37	24.03
IX	4.97	4.36	5.35	7.19	10.73	16.83	30.61
X	4.08	3.69	6.47	7.74	8.86	10.54	13.05
Total, 10 regions	4.90	4.39	6.28	5.53	4.38	4.46	6.95

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